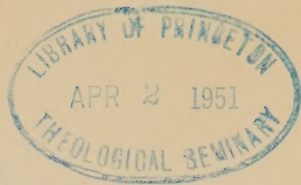


GREEK ALTARS



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GREEK ALTARS

ORIGINS AND TYPOLOGY

Including the Minoan-Mycenaean Offertory Apparatus

*An Archaeological Study in
The History of Religion*

By

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To
DAVID MOORE ROBINSON

PREFACE

A survey of the archaeological information available about Greek altars has long been an urgent need. This study is directed toward filling that need: it provides a new summary and classification of the Helladic (including Minoan-Mycenaean) apparatus pertaining to non-liquid offerings; it also provides, for the first time, a comprehensive survey and classification of extant Hellenic altars. The classification into structural types is established and explained; much needed terminology for altar types and for parts of altars is invented and defined; the evolution of each type is presented; and so far as possible, the relation of each type to ritual and cult is explained. The catalog is intended to include all published remains of altars, and is believed to be complete, if not exhaustively so as to number,¹ certainly as to types. Representations of altars in vase paintings and reliefs are noted also, in order to illustrate the appearance of each type. About 275 articles of pre-Hellenic cult apparatus are listed (plus about 500 items mentioned in § 17); about 625 Hellenic altars and similar objects are described more or less fully and discussed, and as many more are mentioned briefly. Twenty-four tables summarize the most important types. The indexes are complete and are designed to be a real supplement to the text.

About 25 distinct structural types of altars are noted, some subdivided further. These types may be grouped according to size, construction, origin, or ritual function (chthonic or Olympian). The type of altar varies to some extent according to its location, that is, before temples, at public places, in homes, or in country precincts. The location, form, and history of chthonic altars provide material which supplements our knowledge of chthonic ritual. Complementary to the main subject are sections on offering tables, arulae, household altars, sacrificial pits, sacred refuse pits, sculptures from altars, and wall benches.

Two general conclusions pertaining to the history of Greek religion

¹ Inscribed monolithic altars published in various *Corpora Inscriptionum* (and a few other inscribed altars) have not all been listed: their primary importance is in connection with their inscriptions, and, it is hoped, they will be so treated later.

are reached: (a) Burnt flesh sacrifices were not a normal part of Minoan-Mycenaean religion, and special structures for sacrificial purposes did not exist in the Minoan-Mycenaean religious apparatus. (b) The chief types of Hellenic altars are not derived from any kind of Minoan-Mycenaean ritual apparatus; the altars of the Hellenes were imported by the Dorian tribes, which, therefore, must also have been responsible for introducing the concept and practice of burnt flesh sacrifices (§§ 21, 29, 31, 43). The non-specialist reader may be warned that these conclusions are contrary to those now generally accepted.² Chapter I, which deals with the pre-Hellenic period, thus performs the anomalous but necessary function of first surveying the pre-Hellenic offertory apparatus, and then showing that the pre-Hellenic offertory apparatus has only incidental connections with Greek altars.

Two previous studies of Greek altars may be mentioned: A. de Molin, *De Ara apud Graecos* (Berlin dissertation, 1884), 73 pp., is a brief outline based on literary sources; Reisch, P.-W., I (1894), cols. 1640-1691, article "Altar", also draws chiefly on literary sources. These studies were written when most of the now known archaeological material was yet unavailable, and necessarily they dealt rather in generalities. But a great deal of archaeological material has since come to light, and the evidence afforded by this material is an indispensable requisite for an adequate understanding of the religious function of Greek altars, and of other aspects of Greek religion, such as chthonic—Olympian theology, sacrificial ritual,³ the general significance of sacrifices,⁴ and household religion. Previous studies of individual altar types or of particular aspects are cited in the text.⁵

² Demargne, *B.C.H.*, LVI, 1932, pp. 60-88, seems to doubt the existence of Minoan sacrifices. Blegen, *Prosymna*, pp. 250-252, and Persson, *The Royal Tombs at Dendra near Midea*, pp. 68-70, doubt that burial sacrifices were normal in L. H. religion. I can cite no further support of my views.

³ See S. Eitrem, *Opferitus und Voropfer der Griechen und Römer*.

⁴ For general discussions of sacrifice, see Farnell in Hastings, *Encyclopedia of Religion and Ethics*, XI, pp. 12-18, article "Sacrifice (Greek)"; Ziehen, P.-W., XVIII 1, cols. 579-627, article "Opfer". On the rôle of sacrifices in Athenian gentile activities, see Ferguson, *Hesperia*, VII, 1938, pp. 1-74.

⁵ See Chapter I, notes 1, 2, 3, 7, 24, 27, 28, 33, 34, 45, 54-56, 74a, 77, 81, 99, 100; Chapter II, notes 1a, 2, 3, 10, 30, 39, 40; Chapter III, notes 6, 9, 10, 13, 27, 28, 56; Chapter IV, notes 1, 3, 4, 6-8, 15, 19, 20-25, 29, 31, 34-37, 40, 41; also § 54, Nos. 2-15; § 64, Nos. 1, 4-13.

As is natural in a general survey, numerous minor aspects had to be left with only cursory examination, as, for instance, arulae, altars in houses, sacrificial pits, and sacred refuse pits. Certain major aspects also were excluded from full consideration, notably inscriptions and literary evidence, except as they pertain to the typology of altars. Oriental parallels and inedited altars also merit special attention. On the basis of the material presented here, all these subjects can now be more thoroughly investigated, so as to provide a complete picture of the general religious purpose and use of Greek altars. I hope that such particular and general studies will soon be undertaken by others and by myself. In the meanwhile, no apology should be necessary for my having remained within the confines indicated by the title. Indeed, this restricted approach has certain positive advantages: in a field already encumbered by too much easy generalization and loose overinterpretation of evidence, it is useful to differentiate clearly the archaeological evidence from the literary evidence, and this factual evidence from the conclusions drawn therefrom.

The following mechanical details may be noted: ancient Greek is transliterated without Latin as an intermediate, except for established spellings. With the same exceptions, modern Greek is transliterated phonetically, but absolute consistency has not been sought.⁶ The great advantage of a phonetic transliteration is that it provides the correct pronunciation, instead of obscuring it. Bracketed catalog numbers designate items which do not properly belong in the section where they occur, but are included merely for rejection or comparison. For the sake of topographical unity, altars of different types occurring at the same place may be described at the same time; but catalog numbers are not assigned at that point to altars which properly belong in another section. The references to descriptive material have generally been kept in the text of the catalog, if the object being described occupies a single paragraph. The number of references has been kept as low as possible, but an effort has been made to include reference to the latest relevant publication, to the best illustration, and, if the most important publication is apt to be generally unobtainable, to less important publication. When a page

⁶ For a system of phonetic transliteration, see Dawkins, *B.S.A.*, XV, 1908-9, pp. 214-222. I would have preferred, for instance, the spellings *ayios*, *ayia*, but the compromise *agios*, *agia* has been used.

number follows the illustration number, reference is made to the illustration only, for example, fig. 8 p. 38. In Chapters II and III, where the chronological sequence is important, the order of the sections is chronological, as is the order of the items within each section. In Chapter IV the sections are ordered logically, and the items within each section are in alphabetical order, according to geographical location. For the convenience of the non-specialist some technical terms are simplified, and a chronological note (§ 90) has been added. Dates in the text are B.C., unless otherwise noted. Illustrations here do not always reproduce the original illustrations fully, and in some cases have added lettering. Small type is descriptive material, and large type is discussion.

It is heart-warming to call to mind how many persons have willingly and generously helped me during the preparation of this study. It is, therefore, a real pleasure to mention here a few of their names in appreciation. My first thanks must go to Professor David M. Robinson, founder and editor of the Johns Hopkins Studies in Archaeology, who suggested the subject and directed its progress, who has always given of himself unstintingly to me and to all his students, who has encouraged and guided me over many difficulties during the long years of the preparation of this study, and who has made many helpful criticisms and corrections and given me much new material. Despite the multiplicity of his own strenuous pursuits, Dr. Robinson has always found time to be interested and helpful toward those who seek his aid; he has also contributed substantially toward the cost of printing this book. I have also profited materially from comments by Professors William Foxwell Albright and Richard Howland of Johns Hopkins University, Homer A. Thompson of the Institute for Advanced Study, and George E. Mylonas of Washington University in Saint Louis, who have read the text before publication. Rev. Edward P. Arbez, S.S., of the Catholic University of America, Dr. John A. Thompson now of Biblical Seminary in New York, and Mr. Frank M. Cross, Jr., of the Oriental Seminary, Johns Hopkins University, have given me much help in dealing with Oriental material. Professor A. D. Nock of Harvard University discussed with me his views on the general significance of sacrifices and altars. My wife, Mrs. Muriel Ross Yavis, my sister, Miss Elaine Yavis, Dr. Annarie Peters Cazel, Miss Sylvia Shipley, Mr. Maurice Leach, Mrs. Helen Truitt Lawson, have given me valuable help in

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- 86 Pompeii, Temple of Apollo. Ceremonial altar
Pernice, *Hellenistische Tische*, pl. 39, No. 5
Walter de Gruyter & Co., Berlin
- 87 Thasos, Sanctuary of Poseidon. Ceremonial altar in antis
B.C.H., LIII, 1929, pl. XXI
Ecole française d' Athènes
- 88 Vase Painting. Alkmene on altar of logs
Trendall, *Paestan Pottery*, pl. XV
MacMillan & Co., London
- 89 Vase Painting. Altar of boulders
Scheffold, *Untersuchungen zu den Kertscher Vasen*, fig. 71
Walter de Gruyter, Berlin
- 90 Cyrene, Temple of Apollo. Stepped monumental altar
Pernier, *Africa Italiana*, V, pl. III
Ministry of Colonies, Rome
- 91 Eretria, Sanctuary of Isis. Sacrificial pit
Arch. Delt., I, 1915, fig. 2 p. 116
Ministry of Education, Athens

- 92 Priene, Sanctuary of Demeter and Kore. Sacrificial pit
Schede, *Die Ruinen von Priene*, fig. 108 p. 95
Walter de Gruyter & Co., Berlin
- 93 Priene, Sanctuary of Demeter and Kore. Sacrificial pit
Wiegand and Schrader, *Priene*, fig. 123 p. 154
G. Reimer, Berlin

ABBREVIATIONS

A.J.A.	American Journal of Archaeology
A.R.W.	Archiv für Religionswissenschaft
Arch. Anz.	Archäologischer Anzeiger (<i>with</i> Jb. Arch. I.)
Arch. Delt.	Arkhaiologikon Deltion
Ath. Mitt.	Mitteilungen des deutschen archäologischen Instituts, Athenische Abteilung
B.C.H.	Bulletin de correspondance hellénique
B.S.A.	Annual of the British School in Athens
Eph. Arch.	Ephemeris Arkhaiologike
I.G.	Inscriptiones Graecae
J.H.S.	Journal of Hellenic Studies
Jb. Arch. I.	Jahrbuch des deutschen archäologischen Instituts
Jh. Oest. Arch. I.	Jahreshefte des oesterreichischen archäologischen Insti- tuts
Mon. Ant.	Monumenti antichi
Not. Scav.	Notizie degli scavi
P.-W.	Pauly-Wissowa-Kroll, Real-Encyclopädie der classischen Altertumswissenschaft
P.M.	Evans, The Palace of Minos
R. Et. Gr.	Revue des études grecques
Rhein. Mus.	Rheinisches Museum für Philologie
S.C.E.	Swedish Cyprus Expedition
Sb. Berl.	Sitzungsberichte der Akademie der Wissenschaften, Berlin

CHAPTER I

PRE-HELLENIC PERIOD

The present chapter deals with the antecedents of Hellenic altars. The Helladic and Cyprian offertory apparatus is examined, and also such other cult apparatus and structures as might contribute pertinent information. With two minor exceptions, the Aegean sphere provides no close antecedents of Hellenic altar types; but in Cyprus there existed in the second millennium B.C. various kinds of masoned ritual stands, from which the Cyprian altars of the Hellenic era evolved.

A. CRETE ¹

Before the various classes of Minoan ritual objects ² are examined, the contents of four Cretan shrines will be analyzed, where there is clear and direct evidence for the sacred purpose of the types of vessels found there.³

1. Shrine at Gournia. The shrine discovered at Gournia, probably L.M. I, affords excellent evidence for the religious character of the many

¹ General accounts of Minoan religion will be found in H. R. Hall, *The Civilization of Greece in the Bronze Age*, pp. 275-284; and in J. D. S. Pendlebury, *The Archaeology of Crete*, pp. 272-275. The only comprehensive account of Minoan religion is by Martin P. Nilsson, *The Minoan-Mycenaean Religion and its Survival in Greek Religion*. Chapter III, "Altars, Tables of Offering, and Sacral Vessels", pp. 98-131, does not attempt a typological classification, but provides full references, including references to unpublished material and to publications not available to this author; the reader is referred there for additional examples of each class treated below. Nilsson believes that the Minoans practiced burnt flesh sacrifices. His conclusions rest on the *a priori* reasoning of the opening sentence of Chapter III: "The cult needs an altar." Useful also is P. Demargne, "Culte funéraire et foyer domestique dans la Crète minoenne", *B.C.H.*, LVI, 1932, pp. 60-88. Cf. Nilsson, *Geschichte der griech. Religion*, I (Müller Handb.), pp. 249-251, section on "Altäre, Opfertische, und heilige Gefässe"; Axel W. Persson, *The Religion of Greece in Prehistoric Times*.

² Vallois, "Autels et culte de l'arbre sacré en Crète", *R. Et. Anc.*, XXVIII, 1926, pp. 121-132, examines only the forms of tables or stands before sacred trees, mostly as seen in representations on seals.

³ Cf. Nilsson, *The Minoan-Mycenaean Religion*, Chapter II, "House Sanctuaries", pp. 72-97.

objects found in it.⁴ The shrine is opposite the dead end of a street about 12 m. long, which leads off the West Ridge Road. A flight of three steps leads up from the street to the shrine, which is 3 m. by 4 m. in plan. The entrance is from the west, and along the south wall extending part way up the east wall is a low rubble wall bench, as in the shrine at Knossos (§ 2) and in several Geometric shrines (§ 33). There were no traces of pavement. It is possible that this was a walled enclosure of a sacred tree, but that can not be ascertained.

In the center of the room was a low plastered earthen three-legged table with concentric ridges on a flat top with a broken off conical projection in the middle (*ca.* 0.30 m. high and *ca.* 0.42 m. in diameter); around it were three complete examples and fragments of two more terracotta snake cylinders (height 0.42 m., diameter of base *ca.* 0.16 m.), that is, bottomless cylinders with snakes and horns of consecration in relief attached to them. In the room was also found a female figure of coarse terracotta with her hands raised, and entwined snakes, four small terracotta doves, two snakes' heads, and a fragment of a clay pithos decorated with a double axe. The tripod stand and the snake vessels were found upright, and therefore in their original position. Figs. 1, 2, 3.

The snake goddess, the doves, and the snakes and horns of consecration on the snake cylinder give proof that this was a shrine. The excavator, Mrs. Hawes, suggests that one of the broken cylinders, found on the tripod stand, was intended to support a bowl or cup of offering.⁵ Evidence from the shrine in the Palace at Mallia (§ 4) supports this view. From the position of the tripod and the cylinders it is clear that they had a definite ritualistic purpose. The precise use of the snake cylinders is difficult to determine. Evans believed that they served somewhat the same purpose as the snake vessels described below (§ 3). Cook,⁶ following Zahn, believes that they were used for libations.⁷

⁴ H. Boyd Hawes, *Gournia*, pp. 47 f.; pl. XI.

⁵ Evans, *Palace of Minos* (hereafter abbreviated as *P.M.*), IV 1, p. 143 note 6, quotes R. B. Seager, who says that the snake cylinder was not actually on the tripod.

⁶ Cook, *Zeus*, III 1, pp. 192-200, figs. 101-121.

⁷ See § 3 (end), a vessel found at Rhodes; cf. Sam Wide, "Grabesspende und Totenschlange", *Archiv. f. Religionswiss.*, XII, 1909, pp. 221-223, pl. 1; Küster, "Die Schlange in der griechischen Kunst und Religion", *Religionsgesch. Vers. u. Vorarb.*, XII, 1913, No. 2.

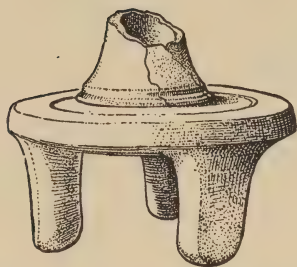


FIG. 1. Gournia. Tripod stand.
(§ 1)



FIG. 2. Gournia. Snake cylinders.
(§ 1)

2. The Shrine of the Double Axes at Knossos. This shrine shows continuity as the seat of a cult from M.M. II or earlier down to the end of L.M. III.⁸ The shrine is 1.52 m. long, the small size being usual for Cretan shrines. The floor is divided into three parallel sections: first (from the entrance) is one extending across the room, on which were found five vases (one L.M. III b). Beyond this area in the center of a level raised *ca.* 0.12 m. which was strewn with water pebbles, was a tripod hearth of the standard Cretan type, evidently with a shallow depression. It had a plain stucco surface, painted a dull white. Its feet were embedded in the plaster floor. There were three smaller vessels on either side, nearer the upper level. Immediately beyond this level is a wall bench, *ca.* 0.45 m. high, of clay and rubble with a plaster facing, which runs along the far wall. On this wall bench were two large sacral horns which had sockets, possibly intended to receive the handles of double axes. With the horns were five small painted terracotta figurines; the largest one (0.22 m. high) represented the Minoan Goddess with the sacred dove perched on her head; of the other four, one is certainly a male worshipper, and holds a dove in his hands. Near one of the horns was found a small double axe of steatite. The wall bench and the lower level are strewn with smooth pebbles, a usual feature in Cretan shrines. Fig. 4.

The shrine was left intact after its destruction, which fact gives it as great importance as the one at Gournia. That the tripod hearth had an important ritualistic function is shown by its position and by the fact that it was permanently bonded with the floor.

At the palace of Phaistos a similar rubble bench (1.00 m. by 0.55 m. in plan, *ca.* 0.69 m. high), with a sort of offering tray on it, was found against the side wall of the small M.M. room V of the chapel.⁹ The excavator, Pernier, interprets this as a grist mill for the preparation of the sacred bread.

3. The Shrine of the Domestic Snake Cult, Knossos. Further evidence for ritualistic use of tripod hearths and cylindrical vessels with snakes, is found in a shrine dating M.M. III b to L.M. II.

This shrine was in a private house near the South West Treasury House at Knossos.¹⁰ By the entrance of the little room stood a large jar which rested on a pavement belonging to the very beginning of the New Era (M.M. III b to L.M. I a). The lower part of the jar (*ca.* 0.20 m.) was embedded in the

⁸ P.M., II 1, pp. 335-344, figs. 189-195.

⁹ Pernier, *Il palazzo minoico di Festòs*, I, pp. 204-207, figs. 88-90.

¹⁰ P.M., IV 1, pp. 138-161, figs. 109-119; suppl. pl. XLVI.



FIG. 3. Gournia. Offering vessels. (Purpose of stepped round object uncertain.)
(§ 1; § 7, Nos. 26-30)

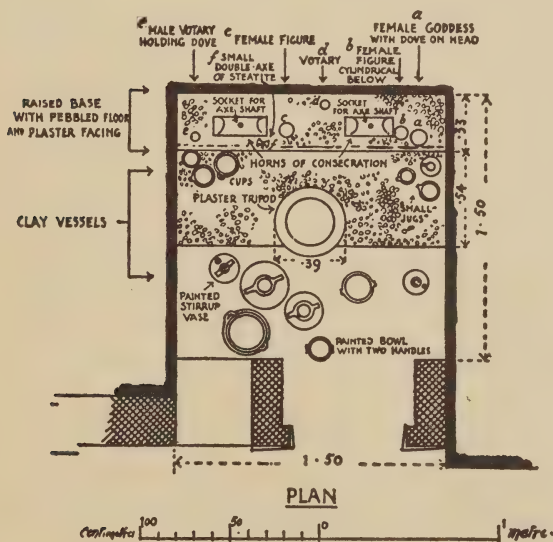


FIG. 4. Knossos. Shrine of the Double Axes.
(§ 2)

substructure of a floor which lasted till L.M. II. The jar was the repository of what appears to have been a complete set of clay vessels and other utensils designed for the tending and cult of the domestic snakes. The jar, and between 30 and 40 vessels it contained, were much broken, probably by the falling of the roof of the house. All the vessels were of rather small size, the largest one a cylindrical snake vessel *ca.* 0.30 m. high.

(a) About 20 plain pots (average height *ca.* 0.08 m.) some without handles, others with rudimentary remains of handles, are believed to represent miniature milk jugs. They are quite similar to vessels found in the Temple Tomb at Knossos. This type of vessel cannot be called a sacrificial vessel, though it did have a ritualistic use.

(b) Several plain shallow bowls, the largest one 0.17 m. in diameter, are similar in form to those containing food offerings, which were found in the later Spring Chamber Sanctuary by the Caravanserai (M.M. III and later).¹¹ Vessels of this type are frequent in M.M. III and L.M. votive collections. In this case also they were probably votive offerings.

(c) A third class of objects will not be dealt with in detail. They are a clay representation of a snake on a wild honeycomb and two representations of a snake on a vessel which is completely perforated with small holes.¹²

(d) Two tripod stands were also found. One is a clay tripod hearth of the usual Cretan form with a flat, disk-shaped body.¹³ What is singular is that the tripod is covered with a gypsum lid which folds over the rim of the tripod hearth. The interior contained ashes. This may be connected with the fact that the Ring-Snake, which is found frequently in water conduits, is attracted to the hearth.¹⁴ Perhaps during the cold season, the hot coals and ashes were left in this hearth, which was placed where snakes could reach it, near some food offering.

The other tripod stand is a unique and unusually interesting object.¹⁵ The body of the tripod consists of a flat cylindrical disk with a raised rim. On the upper surface four troughs, each formed by two ridges, extend from the rim two-thirds the distance to the center, where there is a slight raised circle in which some object fits (diameter of disk 0.25 m.).

(e) Three objects were found to which the name snake vessels will be

¹¹ *P.M.*, II 1, pp. 134-136, figs. 68, 69, discusses this class of bowls. At the Spring Chamber there were remains of food, including olives carbonized by chemical action. On Minoan thymiateria, see *ibid.*

¹² *P.M.*, IV 1, pp. 155 f., figs. 118, 119.

¹³ *P.M.*, IV 1, p. 151, fig. 117.

¹⁴ *P.M.*, IV 1, p. 148.

¹⁵ *P.M.*, IV 1, pp. 149 f., fig. 115.

applied (0.265 m. to 0.29 m. high).¹⁶ They are cylindrical, with a flaring mouth and foot, and closed at the bottom, while snake cylinders are open at the bottom. These examples have attached horizontally to the sides four small shallow saucers arranged symmetrically in pairs. Similar snake cylinders were found at Kumasa¹⁷ and Prinias.¹⁸ At the latter place there was found with the cylinder an image of the goddess like the one found at Gournia.

It was suggested by Evans that a vessel placed on the second tripod contained offerings for the snakes, and that the four grooves were intended to facilitate their ascent. It is more probable, however, that some vase without foot rested on this stand, the bottom of the vessel resting in the circular ridge, and its four-legged metal or wooden support resting in the troughs.

Evans believed that the snake vessels evolved from the two-handled drainpipes of the palace, where the snakes would naturally be found.¹⁹ The simpler snake cylinders, without the sacral horns and snakes, merely have four sets of handles in a continuous row, which either indicate relationship of the cylinders with the drain pipes or are stylized representations of snakes. The snake vessels are a further evolution from the snake cylinders, but the two existed contemporaneously.

The similarity of the snake vessels of this shrine to the snake cylinders of Gournia, Prinias, and Kumasa, where there are snakes molded in relief ascending the sides of the vessels, suggested to Evans that the saucers were intended to receive the food offerings for the snakes, probably milk. The interior of the cylinder was intended as a place of shelter for the snakes.

Cylinder stands (without the snakes) with four or more openings were found at Knossos,²⁰ Gournia,²¹ Aegina,²² Mallia (§ 4), and elsewhere without any sacred signs. Perhaps they were used for non-religious purposes also. A cylindrical vessel with sacred purpose was found at Beth-Shean, with two oval-shaped windows similar to the Cretan ones.²³

¹⁶ *P.M.*, IV 1, pp. 140-145, figs. 110, 111.

¹⁷ *P.M.*, IV 1, p. 142, note.

¹⁸ Pernier, *Bolletino d'Arte*, II, 1908, pp. 455-457; fig. 10. Cf. Wide, *Arch. Mitt.*, XXVI, 1901, pp. 247-257, pl. XII.

¹⁹ *P.M.*, IV 1, pp. 145-149, figs. 111-114.

²⁰ *P.M.*, II 1, pp. 133 f., fig. 67a.

²¹ *P.M.*, II 1, p. 139, fig. 70 *bis*.

²² Stais, *Eph. Arch.*, 1895, col. 258, pl. X 10.

²³ Watzinger, *Denkmäler Palästinas*, I, pl. 29, fig. 63.

The degree or kind of divinity attributed to the snakes is difficult to determine. But the relative rarity of representations of snakes, as compared with those of the Goddess, indicate that they were regarded as minor spirits. In later times the cult of the snake as the household genius spread throughout Greece and Italy. The snake had religious significance in Egypt, Phoenicia, and elsewhere in the Orient.²⁴ It is clear that snake vessels and snake cylinders are closely connected with the worship of the snake.

The finds of this shrine raise the question whether there was a special theriolatric cult of the snake as the household genius, distinct from any connection the snake had with the Goddess. Evans believes so, evidently because the snakes were found in *household* sanctuaries, and because the absence of any anthropomorphic representation among the finds of this shrine may indicate a cult distinct from that of the Snake Goddess.²⁵ But it is difficult to conceive of a separate cult of the snake by itself, when at the same time it was strongly affiliated with the Goddess, as seen, for example, in the shrine at Gournia. Besides, the snake is not affiliated exclusively with household shrines. The shrine of Gournia (§ 1) is certainly not a domestic shrine, and the terracotta figurine of the goddess with the snake found there, shows that at Gournia she was worshipped with the snake. A snake cylinder of Minoan or sub-Minoan date from Rhodes, consisting of three sections concave in profile, has doves, which are connected with the Goddess, as well as snakes attached.²⁶ It is, therefore, quite probable that in this

²⁴ Much material pertaining to the spread of the snake cult in the Eastern Mediterranean will be conveniently found in Kurt Galling, *Biblisches Reallexikon* (1937), s.v. "Schlange", pp. 458 f. (the snake goddess mentioned therein is discussed in *The Ann. of the Amer. Sch. of Oriental Res.*, XVII, 1936-1937, *The Excavation of Tell Beit Mirsim*, II, *The Bronze Age*, W. F. Albright, pp. 42 f. and pls. 21, 22); Hugo Gressmann, *Altorientalische Texte und Bilder zum alten Testament*² (1927), see index, p. 223, s.v. "Schlange"; Adolph Erman, *Die Religion der Agypter* (1934), pp. 45 f., 296-298; Carl Watzinger, *Denkmäler Palästinas* (1933), pp. 69 f. and pl. 29, figs. 63-66; Evans, *P.M.*, IV 1, pp. 167 f.; Paul Toscane, "Etudes sur le serpent, Figure et symbole dans l'antiquité élamite", pp. 153-228, in *Délégation en Perse, Mémoires, Quatrième série, Tome XII, Recherches Archéologiques* (1911).

²⁵ *P.M.*, IV 1, pp. 142 f.

²⁶ Zahn, "Kultgerät aus Rhodos", in Kinch, *Vroulia*, pp. 26-34, fig. 13; Ferri, *Divinità ignote*, pp. 11-18, figs. 5-7, pl. XX.

sanctuary, also, the snake was worshipped in conjunction with the Goddess. The association of the Goddess, representing the forces of life, with the snakes, would be appropriate, if the snakes were associated with growth or even with decay and death.

It may be questioned whether the *therapeia* of the snake was really a theriolatric cult, since no other animal appears to have been the object of worship. Instead, the snake may have been worshipped as a manifestation of the spirit of the departed. This supposition is supported by the use of *kernoi*, somewhat similar to snake cylinders, for libations to the dead in Hellenic times. While the central figure of Minoan worship, the Goddess, was supplanted by the Great Gods in Hellenic times, the simpler elements, such as the worship of holy trees, and the tendance of the dead, remained. Precisely the same elements have left traces in modern Greek customs, according to which in many districts olive oil is poured over the casket in the grave, before the earth is replaced. And trees—*pournari* (*prinos*) trees, in the Peloponnese—usually serve to mark the hallowed spot of ruined or vanished rural churches.

4. Shrine in the Palace at Mallia. The following is quoted from the brief preliminary report (the sanctuary is M.M. III):

. . . la salle qui s'appuie immédiatement à la muraille du bastion Sud-Ouest . . . est quadrangulaire, avec un dallage soigné. On y a trouvé des vases à trois pieds très largement épanouis, portant au fond une petite cupule, noircies intérieurement par les fréquents combustions; de longs récipients tubulaires, percés sous les anses de trous d'aération et coiffés d'une petite assiette d'argile. Ces deux séries d'ustensiles sont des encensoirs ou des brûle-parfums; des pincettes de bronze, trouvées auprès de l'un d'eux, avaient servi à y déposer les charbons. . . Ici, comme là [à Cnossos], il s'agit d'un petit lairé, et on ne s'étonne point d'y rencontrer des coquillages, analogues à ceux du sanctuaire de la déesse aux serpents, une longue conque, accessoire fréquent des sanctuaires minoens; enfin, ce qui est le plus important, un autel fait d'un bloc d'*amouda* soigneusement taillé, incurvé sur les côtés, marqué sur l'une des faces d'une étoile, sur l'autre d'une croix.—*B.C.H.*, LIII, 1929, Chronique de fouilles, p. 523, fig. 11. Cf. F. Chapouthier, *Mallia*, VII (under press when this was written).

These cylinder stands served a practical purpose in the ritual, being used here as stands for incense-burners, although elsewhere such use is not attested; the tripod thymiateria also appear to be of unique type. The "altar" found here appears to be a sacred stand, discussed below (§ 8).

At the same palace, almost at the geometric center of the Esplanade, some sort of subterranean oven or crematory or refuse deposit was found:

Le détail de beaucoup le plus remarquable est un *bothros* ouvert au centre quasi-géométrique de l'esplanade. Le revêtement de brique est conservé sur trois côtés; 4 briques dressées au centre permettaient sans doute de faire du feu; la dépression était encombrée de tessons et de charbon; on y a aussi trouvé quelques os.—Roussel, *B.C.H.*, LIV, 1930, Chron. d. fouilles, p. 519; not mentioned in the description of the Esplanade, Chapouthier and Demargne, *Fouilles exécutées à Mallia*, Troisième rapport (Ecole française d'Athènes, Etudes crétoises, VI).

5. Snake Vessels, Snake Cylinders, Offering Bowls. The chief objects of these classes of offering apparatus were examined in the preceding sections, where they were shown to have a religious use connected, in the first two cases, with the *therapeia* of the snakes, and, in the third case, with bloodless offerings. Minoan and Mycenaean libations have been studied elsewhere.²⁷

6. Tripod Hearths. Clear evidence for the religious use of these hearths is seen above, as well as in No. 8 below. Evans has shown that hot coals on tripod hearths or clay chafing pans were used in graves in connection with the tendance of the dead.²⁸ On the other hand tripod hearths, especially the stone ones, were also used for simple utilitarian purposes.²⁹ The usual diameter is about 0.50 m., and may be as large as 1 m.

²⁷ Evans, "Mycenaean Tree and Pillar Cult", *J.H.S.*, XXI, 1901, pp. 112-118; Wace in *B.S.A.*, XXV, 1921-23, pp. 379 f., where further references. It is important to distinguish between libations, solid food offerings, and burnt flesh offerings, with their respective relevant apparatus.

²⁸ Evans, *The Prehistoric Tombs of Knossos*, p. 36, fig. 33; cf. *P.M.*, II 1, p. 283.

²⁹ Cf. *P.M.*, II 1, p. 283; Xanthoudides, *Eph. Arch.*, 1922, p. 14, fig. 11.

1. Gournia, shrine. See § 1.
2. Knossos, Shrine of the Double Axes. See § 2.
3. Knossos, Shrine of the Domestic Snake Cult. See § 3.
- 4-6. Mallia, Palace Shrine. Several hearths. See § 4.

7. Knossos, Palace. Fragments of numerous tripod hearths with painted decoration, of M.M. date.—*P.M.*, I, p. 551.

8. A tripod hearth faced with white stucco was found in L.M. III chamber tomb 14 of Zafer Papoura at Knossos with coals still on it—Evans, *The Prehistoric Tombs of Knossos*, p. 36, fig. 33 (from *Archaeologia*, LIX (second series, IX), 1905, pt. 2, pp. 391-562). Fig. 5.

9. A similar tripod, faced with the same white stucco, was found in a storeroom near the Northeast Hall of the Palace at a M.M. III level.—*P.M.*, I, p. 390.

10. A tripod hearth of M.M. III date found in Kouloura I in the West Court of the Palace is interesting, because it has around the outside a wave-like pattern with rosettes between the points. (Evans has shown that this pattern frequently has a religious association; ³⁰ it is evidently derived from the marks on the adder's back, and also occurs on the permanent hearth in the Megaron at Mycenae, § 13.)—*P.M.*, IV 1, p. 180, fig. 142. Fig. 6.

11-54(?). Xanthoudides excavated a sanctuary at Nirou Khani (L.M. I) in Crete which had approximately forty rooms. In three rooms remains of 40 to 50 tripod hearths of painted clay were discovered. They were decorated in red, black, and white bands, and closely stacked in piles of five. Some were nearly 1 m. in diameter. The hearths may have been brought there as votive objects, but it seems more probable that they were sold there. Evans suggests that they were altars exported to the mainland for propaganda purposes.—Xanthoudides, *Eph. Arch.*, 1922, pp. 15 f., fig. 12; *P.M.*, I, p. 437; II 1, pp. 281-283.

55, 56. Two similar hearths (0.90 m. and 0.56 m. in diameter respectively) were found at the M.M. III House of the Sacrificed Oxen.—*P.M.*, II 1, pp. 302 f., fig. 175.

³⁰ *P.M.*, IV 1, pp. 179-185, figs. 141-145.



FIG. 5. Knossos. Tripod hearth and other objects from tomb.
(§ 6, No. 8)



FIG. 6. Knossos. Tripod hearth from the palace.
(§ 6, No. 10)

57. A small tripod stand with a raised center, found at Tylissos, is probably a thymiaterion.—Hatzidakis, *Eph. Arch.*, 1912, p. 212, fig. 18.

The movable clay and plaster tripod hearths occur no earlier than M.M. times. Since small movable hearths were thereafter in such common use, it is remarkable that the Minoans did not enhance the pomp of ceremonies by using larger permanent hearths. Instead, the architectural evolution was in the opposite direction, evidently as a result of Egyptian influences: permanent hearths were known in Neolithic houses and as late as Middle Minoan I, and then gave way to portable hearths.³¹ It appears that both types served only as braziers, and that the fires were started and cooking performed outside the main room.

It is not possible to determine exactly the ritualistic use of the tripod hearths. It may be said, however, that they were related to the worship of the snake goddess and used especially in small shrines. There is no evidence that burnt flesh offerings of animals were made on them. No bones or other carbonized matter was found among the ashes, and in most cases the tripod hearths were too small for burnt flesh offerings. Rather, one may suppose that they were used to burn incense and salt, that olive oil was poured on the coals to cause a sudden flare, and that milk or other bloodless offerings were prepared on them. The Minoan tripod altar foreshadows the location of the hearth altars in the center of Hellenic temples, but the two differ in purpose as in construction.

7. Offering Trays, Offering Bases, Offering Stands, Fixed Libation Trays. These objects could not have had any practical purpose, their use evidently being connected with ritual. They have one or more shallow depressions, which served to receive either a token portion of food (solid or liquid) for the divinity, or less probably actual nutrition for the household snakes. The three depressions found in some of the vessels may be connected with the triple libation at graves of Hellenic times.³² Most are of stone. Fixed libation trays may be considered a variety of kernoi (§ 10).

³¹ *P.M.*, II 1, pp. 18-21, figs. 8A, 8B; Demargne, *B.C.H.*, LVI, 1932, pp. 76-88; cf. Mylonas, 'Η νεολιθική εποχή ἐν Ἑλλάδι, p. 103.

Another instance of sacred use of fire, though not for sacrificial purposes, is seen at the sanctuary of Petsofa near Palaikastro (before Late Minoan), where votive male and female figurines were thrown into a large fire: Myres, *B.S.A.*, IX, 1902-03, pp. 357 f., 360 f., 380 f.

³² Cf. *Odyssey*, x, 518-20; xi, 27, 28; cf. Hayman, *The Odyssey of Homer*, II, refs. *ad loc.*

The following terminology is used here: Fixed libation trays are permanently embedded in the floor. They have 10 to 40 small depressions in a circle (cf. also No. 57). Offering trays are round or rectangular, stone or terracotta flat slabs, which have one or more depressions in the upper face. Offering bases are rectangular or circular, but the height is approximately equal to or greater than the width. The examples cited here have only one depression. Offering stands of stone or terracotta are shaped nearly like the tall lamps or candle sticks, from which they cannot easily be distinguished;³³ they have a narrow cylindrical body with a flaring base and bowl. Only one example is known from Crete. This classification is made for the sake of convenience; it is probable that in actual use no such distinctions were made. Non-Cretan examples are included below.

Fixed Libation Trays

1. Phaistos. Pernier discovered north of room VIII of the early Palace (M.M.) in a passageway from the East Theatral Area, a large square depression *ca.* 1.70 m. by 2.40 m., with a round depression (diam. *ca.* 0.80 m.) in the middle, apparently a colossal libation table.—Pernier, *Il palazzo minoico di Festòs*, I, pp. 206-208, fig. 90.

2, 3. Mallia, Palace. (a) A round limestone disk, 0.87 m. in diameter and 0.36 m. thick, had around its outer circumference 34 shallow depressions (one slightly larger than the other), and a much larger and deeper depression in the center. It was set in the pavement before a wall bench. (b) Another less carefully constructed "tray" is formed by 40 irregular depressions around the outer edge of a rectangular slab; one of these depressions is slightly larger, and in the center is a considerably larger depression.—Chapouthier, "Une table à offrandes à Mallia", *B.C.H.*, LII, 1928, pp. 292-323, figs. 1-9 (where full discussion); *P.M.*, III, pp. 392-394 (where these are interpreted as gaming tables); *A.J.A.*, XXXIV, 1930, pp. 76 f. Fig. 7.

4-6. Mallia, Precinct and Cemetery of Chrysolakkos. Chiefly Middle Minoan. (a) Found near precinct, evidently originally in the precinct. Limestone block, upper side, flat and circular in plan, the surface poorly preserved. Around the outer edge was a ring of 30-36 small shallow circular

³³ Stone lamps are discussed by Beazley, "A Marble Lamp", *J.H.S.*, LX, 1940, pp. 22-49, figs. 1-30, pls. V-VII.

depressions, of which about 10 are not extant, because of damage to the stone; there is also an inner ring of 13 similar depressions about a larger one in the center; and in each ring one depression is larger than the other depressions, these two larger ones being on the same radius. Height of stone .0.40 m.; horizontal diameter 0.77 m. and 0.67 m. (b) Found *in situ* in a room of the precinct. Circular stucco tray level with, and bonded with the floor, the inner part slightly raised, and a depression in the center. Reddish and blackish stains, evidently from burning of oil lamps or incense. (For lamps in Minoan tombs, see Evans, *The Prehistoric Tombs of Knossos*, tombs 9, 32, 95, 97 at Zafer Papoura.) Diameter 0.63 m. (c) Found *in situ* inside

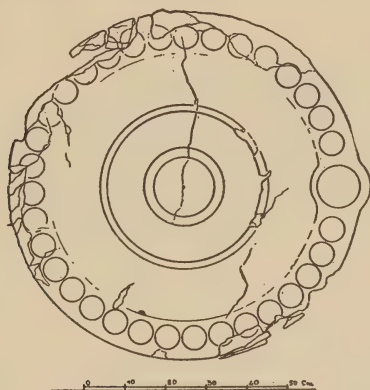


FIG. 7. Mallia. Fixed libation tray from the palace.

(§ 7, No. 2)

building. Middle Minoan I. Stucco "base" in the form of a cylinder inscribed in a stepped rectangle; the interior of the cylinder was found filled with earth and pebbles, but was probably empty originally. Height preserved, 0.36 m., diameter of cylinder 1.08 m., maximum width of entire base, 1.12 m. Several small depressions were noted in the extant part of the floor.—Demargne, *B.C.H.*, LVI, 1932: (a) pp. 61-63, fig. 1, pl. III 1; (b) pp. 64 f., figs. 2, 3; pl. III 2; (c) pp. 66-76, fig. 5; pls. IV 1, 2; V.

7. Kavousi, M.M. III b. Ten depressions in circle on upper flat surface of otherwise unworked block. Diameter *ca.* 0.50 m.—H. Boyd Hawes, *A.J.A.*, Ser. 2, V, 1901, p. 141, fig. 7; Chapouthier, *B.C.H.*, LII, 1928, pp. 303 f., fig. 10; *P.M.*, III, pp. 391 f., fig. 262 (where a geometric date is assigned, and the object considered a gaming table).

8. Knossos, Queen's Megaron, M.M. II(?). A fragment of a similar slab, originally probably with twelve depressions in the circle.—*P.M.*, III, pp. 390 f., fig. 261 (where it is considered a gaming table).

Offering Trays

9. From Phaistos, Chapel of Palace (room VIII). Black clay with S's and bulls stamped on the border, 0.55 m. long, 0.48 m. wide, M.M. In the middle of the rectangular shallow depression which occupies the greater part of the tray is a smaller circular one.—Maraghiannis, *Antiquités Crétoises*, I, pl. IX; Montelius, *La Grèce préclassique*, fig. 230 p. 70 (*Mon. Antichi*, XIV, pl. XXVI). Figs. 55, 56.

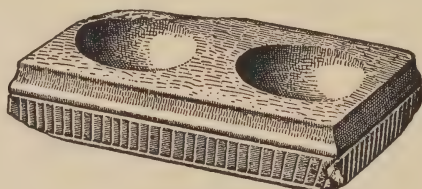


FIG. 8. Phaistos. Offering tray.
(§ 7, No. 10)

10. From Phaistos, of steatite, with two round depressions.—Mosso, *The Palaces of Crete and their Builders*, fig. 65 p. 144. Fig. 8.

11. At the Diktaion Antron a very oddly shaped tray of steatite was found which is restored with four legs connecting with another slab below and a conical mass in the middle connecting with both slabs. Cf. § 9, No. 11. In the upper face were three depressions. Inscription. Before M.M. III.—*P.M.*, I, pp. 625-630, figs. 465, 466.

12. From Gournia, with a rectangular depression.—H. Boyd Hawes, *Gournia*, pl. XI No. 24.

13-24(?). Many fragments from the Diktaion Antron. Steatite.—Hogarth, *B.S.A.*, VI, 1899-1900, p. 114, fig. 50, pl. XI Nos. 1, 2, 5. Fig. 9.

25. From Tylissos, round marble disk (fragment).—Hatzidakis, *Eph. Arch.*, 1912, p. 231, fig. 39 p. 230 (middle of top row; the object to the left in the bottom row is a potter's wheel).

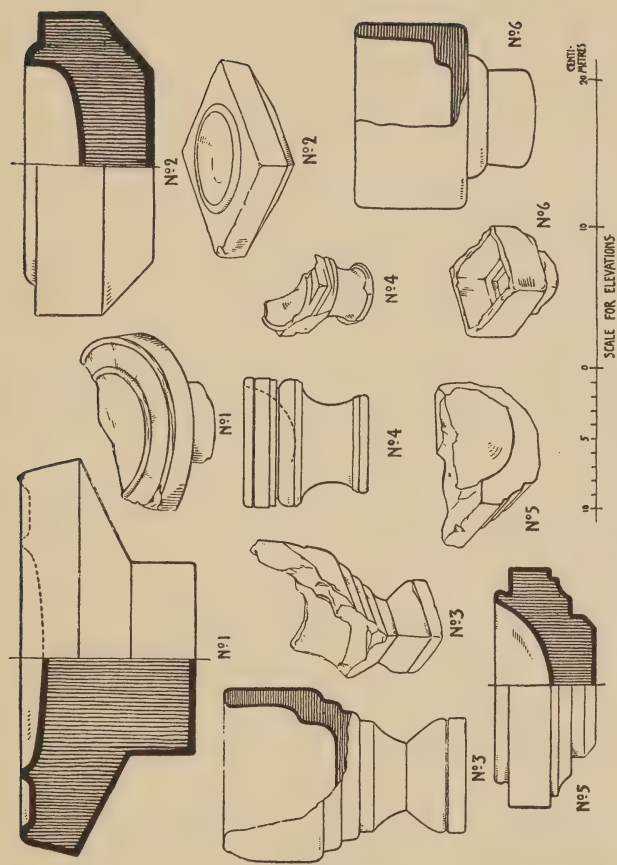


Fig. 9. Diktaion Antron. Offering vessels.
(§ 7, Nos. 13-24, 35-50, 58, 59)

Offering Bases

26-31. From Gournia. All of stone. No. 1 is round, with a narrower base than lip, and a round depression. No. 2 is rectangular with a round depression, the body consisting of three bands successively receding toward the base. No. 3 is rectangular with a square depression, the body consisting of two parts, the lower receding. No. 4 is rectangular with a round depression. No. 5 is rectangular with a square depression. No. 6 is rectangular with two round depressions.—H. Boyd Hawes, *Gournia*, p. 36, pl. V Nos. 14, 15, 17, 18, 19, 25 respectively (No. 20 may also belong in this list). Fig. 3.

32, 33. Crete. (a) Rectangular, consisting of three parts diminishing toward the base; round depression; of brownish limestone. (b) Provenience not given. Square base and top, the body narrower in the middle; instead of a depression in the stone, the stone is worked to appear like a saucer resting on the base.—Maraghiannis, *Antiquités crétoises*, III, pl. XXX.

34. From Phaistos. Cubical, with sides tapering inward toward the base, and the interior hollowed out, 0.084 m. high. Doves are incised on two sides. Of dark green steatite.—Pernier, *Il palazzo minoico di Festòs*, I, pp. 235-238, fig. 113.

35-50(?). Many examples from the Diktaion Antron. Most are square with a round depression.—Hogarth, *B.S.A.*, VI, 1899-1900, p. 114, pl. XI Nos. 3, 4, 6. Fig. 9.

51-53. From Phaistos. (a) Rectangular, with sides tapering toward the bottom. Stone, round depression, raised lip. Rosettes, triangles in sunken relief. (b) Two examples similar to previous one, but with no ornamentation, one stone, one terracotta.—Pernier, *Il palazzo minoico di Festòs*, I: (a) pp. 227 f., fig. 105; (b) pp. 221 f., figs. 99, 100.

54, 55. From Tyllissos. (a) Rectangular with sides tapering toward the bottom. Rests on a recessed narrow rectangular base. Poros. Height 0.125 m., length of sides 0.145 m. (b) Rectangular with raised round boss in middle. Consists of six layers successively smaller toward the bottom. Steatite.—Hatzidakis, *Eph. Arch.*, 1912: (a) p. 217, No. 5, fig. 23 b; (b) p. 218, fig. 25.

Offering Stands

56. From Sesklon, with three depressions. Evidently miniature of one-footed stands; three cups on upper surface. Height 0.052 m. Clay. Neo-

lithic(?).—Tsountas, *Αἱ προϊστορικαὶ ἀκροπόλεις Διμηνίου καὶ Σέσκλου*, cols. 347 f., fig. 286.

57. From Prosymna, L.H. I. Terracotta, round, with round depression in top, about which 12 depressions in the flaring rim (cf. Nos. 1-8). Bottom part not extant.—Blegen, *Prosymna*, I, pp. 211, 213 f; II, figs. 539, 672, 673.

58, 59(?). Several examples from the Diktaion Antron.—Hogarth, *B.S.A.*, VI, 1899-1900, p. 114, pl. XI No. 3. Fig. 9.

60, 61. Two from Tylissos, of steatite. Small circular depression in top. Two small triangular handles fall downward from the top. (a) Height 0.50 m., diam. at base 0.23 m., at top 0.195 m. (b) Height 0.44 m.—Hatzidakis, *Eph. Arch.*, 1912, pp. 216 f., Nos. 1 and 2, fig. 22a and b.

8. Sacred Stands with Concave Sides. Among the various types of sacred stands is the rectangular "altar" with concave sides, which may have spread from Minoan Crete, to Palestine, Carthage, and Etruria in the first millennium.³⁴ Outside of Crete it was a real altar; it was often provided with the ram's heads at the corners and with flowers, and it was connected with the worship of Zeus, Baal, or some other chief male god who was to watch over the deceased. In Crete it was used only as a small sacred stand. These stands and the shrines of the following section were not used to burn flesh offerings, and the form of these two types have only distant resemblance to the form of Hellenic monolithic and ceremonial or monumental altars, respectively, so that there can be no connection between these Minoan objects and Hellenic altars. Evans and Hogarth (as cited below) consider Nos. 1-6 below as representing altars.

1. The oldest example may be a doubtful M.M. II clay miniature, which was found among many small clay votive objects including miniature shrines, in the Basement of the Loomweights area. It is rather crudely fashioned in the shape of an H on its side, and with its profile from top to base in a continuous curve. Height slightly more than $2\frac{1}{2}$ inches.—*P.M.*, I, p. 221, fig. 166 H.

³⁴ Cf. Elderkin, *Archaeological Papers*, I, 1941, *The Ancient Altar with Incurved Sides*, pp. 11 f. who evidently believes that in Crete also it was used for sacrifices.

2. The most important object of this class is a gypsum sacred stand found in the Private Chapel of the High Priest's House near the Palace at Knossos. This building was in use during the same period as the later palace, i.e. M.M. III to L.M. II. The stand consists of a square plinth base and a similar coping. The vertical sides of the stand are concave on three faces, and flat on the fourth. It measures 0.34 m. in height and 0.44 m. square at the coping.³⁵ It is made of gypsum, and the surface was rather damaged from use or weathering. Probably there was painted decoration, but no traces remain. It was found in another part of the chapel, but its one flat side shows that it belongs against the wall, and the most appropriate place is at the center of the wall on the higher level opposite the entrance. From some point of this upper level, on the longitudinal axis of the chapel and opposite the stand, a drain began which ran below the floor of the chapel.—*P.M.*, IV 1, pp. 207-213, figs. 159-161. Fig. 10.

This stand was not used to burn offerings. The excavator's report mentions no traces of fire which would probably be left if hot coals with incense were placed on it, and to have a fire against a wall would be contrary to the usual practice with tripod hearths. Besides, this material would not be suitable to withstand a fire. The stand, therefore, was designed to receive either food offerings of some kind or to serve as a stand for a sacred object or an offering vessel. That the half-rosette frieze so frequent in Minoan architecture was derived from the incurving sides of these stands, is improbable.³⁶

3. A somewhat similar stand with concave sides, *ca.* 0.27 m. high, was found in a house at Zakro.—Hogarth, *B.S.A.*, VII, 1900-1, p. 136, fig. 47.

4. A sacred stand with concave sides is seen in the well-known lentoid intaglio from the Idaion Antron. A female divinity is blowing into a conch-shell. Opposite her is a stand with concave sides surmounted by sacral horns. Perhaps the stand is intended to be of the same type as § 7, No. 56 (*Sesklon*), rather than as No. 2.—Furtwängler, *Die antiken Gemmen*, III, p. 47, fig. 22; *P.M.*, I, p. 222, fig. 167; IV 1, fig. 162 p. 210. Fig. 11.

5, 6. Two other examples may be represented in objects from Knossos: (a) a plaque from the Town Mosaic, on which the façade of a house is rep-

³⁵ But *P.M.*, IV 1, fig. 160 p. 209, gives respectively 0.56 m. and 0.42 m. by 0.42 m., which seem to be nearer the correct proportions.

³⁶ The suggestion is advanced by Fyfe, "Note on the Triglyph and Half-rosette Band", in *P.M.*, II 2, pp. 605 f., and seconded by Evans, *ibid.*, p. 607.

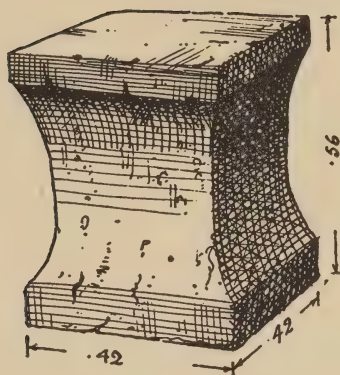


FIG. 10. Knossos. Stand from High Priest's House.
(§ 8, No. 2)



FIG. 11. Intaglio from the Idaion Antron. Representation of sacred stand.
(§ 8, No. 4)

resented with an in-curving design; (b) a fresco design from the Throne Room. Both are probably merely decorative.—*P.M.*, II 2, fig. 381 c p. 608.

7. The stand with incurving sides from the shrine in the Palace at Mallia is mentioned above, § 4.

[8.] A stand with straight sides, quite like a Hellenic rectangular monolithic altar, is depicted in the fresco scenes on the Agia Triadha sarcophagus (cf. § 9, No. 7). But a shallow vessel and a pitcher rest on the top of the structure, so that a libation or food offering is indicated, not a burnt flesh sacrifice.—Petersen, *Jb. Arch. I.*, XXIV, 1909, fig. 2 p. 167. (The illustration in Lagrange, *La Crète ancienne*, fig. 32 p. 62, is incorrect.)

9-11. Three stands with concave sides support the couch in the famous scene on the Ring of Nestor.—*P.M.*, II 2, fig. 289 p. 482.

12, 13. Two M.M. III or L.M. I a seal impressions show two opposed lions over a stand with incurving sides.—*P.M.*, IV 2, figs. 599 b and c p. 611.

[14.] A miniature of a Neolithic round one-footed stand from Sesklon is mentioned above, § 7, No. 56.

[15.] In this connection may also be mentioned a small stand found near the High Priest's House, at Knossos. This small rectangular limestone stand (0.15 m. high) tapers slightly toward the top, but does not have concave sides. Each side has in relief sacral horns at the bottom and a double axe above. The handle of the double axes is not extant. Perhaps it was painted, or, as Evans believed, of plaster. There is a square depression in the upper face which evidently had the same purpose as the depressions in the offering stands, or less probably, it was intended as a stand for a libation vessel or for some ornament such as a figure of the goddess, sacral horns, or double axe.—*P.M.*, IV 1, pp. 200-202, fig. 154.

9. Roadside Shrines. These structures appear to have been analogous to the shrines in the European countryside today, that is, a sacred place for prayer and rest, and a place where an offering could

be left. There is no reason to believe they contained apparatus for burnt flesh sacrifices. Two types of shrines occur, corresponding to the two modern types: either a mere stand for sacred objects (Nos. 1-6, 20) topped by sacral horns; or a small colonnade or wall, or building containing a sacred tree or column within (Nos. 8, 9, 11-19, 21-24).³⁷

1. A fragment from a rhyton shows in relief a square structure of ten courses of ashlar, about as high as the breasts of the two men before it. The structure is evidently cubical, does not have a door or a niche, and is surmounted by a sacral horn. The sacral horn indicates that this structure is some sacred object, in appearance somewhat resembling large Hellenic altars.—*P.M.*, II 2, p. 614, fig. 386; Nilsson, *Minoan-Mycenaean Religion*, p. 100; both consider this structure an altar. Fig. 12.

2. The same type of structure is represented in a clay miniature model found at Knossos. It is rectangular with a projecting base and cornice, and each side is surmounted by sacral horns.—*P.M.*, I, pp. 220 f., fig. 166 A. Fig. 57 A.

3, 4. Actual remains of two small shrines may be two structures along the west side of the palace at Knossos in the West Court, which date M.M. III b. The first structure was situated a little west of room 13. Extant is the lowest course of a rectangular structure 0.90 m. by 1.72 m. in plan which, because it had no foundations, could not have been very large. The other structure, further south, is west of room 4 between the earlier and later palace walls (i.e. between the M.M. III b wall and the wall before M.M. III b). It consists of "two massive slabs" forming the base, and was slightly smaller than the previous shrine.—*P.M.*, II 2: (a) p. 612, fig. 348; (b) pp. 613 f., fig. 385.

5. A similar shrine is evidently represented by a pair of colossal sacral horns from the palace at Knossos. Middle Minoan.—*P.M.*, II 1, p. 160, fig. 81 p. 159.

6. In the Diktaion Antron was discovered a mass of squared stones without binding matter, covered by ashes, which was interpreted by Hogarth as an altar. Originally it was about three feet high and about 2 by 1.5 ft. in plan. Near it was a complete offering stand and fragments of about 30 more. The offering trays, bases, and stands from the Diktaion Antron described above (§ 7), were found near this structure, buried under a "votive

³⁷ The term *calvaire* in French designates either type of shrine.



FIG. 12. Rhyton Fragment. Representation of small roadside shrine.
(§ 9, No. 1)



FIG. 13. Agia Triadha Sarcophagus. Master standing before stepped object,
receiving gifts.
(§ 9, No. 7)

or sacrificial deposit consisting of earth much blackened with carbonized materials, ashes, the bones of oxen, swine, and goats, together with the horn of an Agrimi or Cretan wild goat a foot and a half in length".³⁸ (A stratum of ash extended over most of the floor of the cave.) This deposit must come from ceremonial feasts, rather than from sacrifices or sacrificial feasts.³⁹ The cave was in use chiefly during the Middle and Late Minoan periods.—Hogarth, "The Dictaeon Cave", *B.S.A.*, VI, 1899-0, pp. 94-116.

[7.] The well-known fresco scenes on the Agia Triadha sarcophagus, which probably dates at the end of M.M. II, represent, according to the most generally accepted views, scenes from the funeral rites of the deceased,⁴⁰ who is standing before a low three-stepped structure, presumed to be an altar.—Rodenwalt, *Tiryns*, II, pp. 198 f.; *Mon. Ant.*, XIX, pls. 1-3, figs. 21-23; *Jb. Arch.* I., XXIV, 1909, pp. 166 f., figs. 1-3; *P.M.*, I, figs. 316, 317 pp. 439 f.; IV 1, pp. 40-44, fig. 27. Fig. 13.

It seems more probable that these scenes represent a harvest feast which the deceased attended, not a funeral sacrifice, since the so-called mummy is actually represented with open eyes. It is impossible to consider the low stepped structure as an altar. For the structure clearly does not have a fire, or even fruit or any other votive objects. And besides, this type is without Minoan or Mycenaean parallel.⁴¹ There are no true Hellenic parallels, and the nearest approximate parallels are the Classical and post-Classical stepped pyramidal altars (§§ 40, 67). But stepped pyramidal altars are merely a natural outgrowth of ordinary rectangular monolithic altars. To the left in the same scene two women are represented carrying three large jugs, which they evidently will empty into a pithos standing between two prophylactic posts topped by double axes and doves. It has been suggested that the women have collected

³⁸ *P.M.*, I, p. 627.

³⁹ Lagrange, *La Crète ancienne*, pp. 48 f., fig. 23, and Nilsson, *The Minoan-Mycenaean Religion*, p. 100, consider that sacrifices were performed there.

⁴⁰ Lagrange, *op. cit.*, pp. 60-67; *P.M.*, I, pp. 439 f.; Nilsson, *op. cit.*, pp. 100 f.

⁴¹ A small rectangular base with successively recessed levels (*P.M.*, I, fig. 314, p. 437), and the structures depicted on the Ring of Minos (*P.M.*, IV 2, fig. 917, p. 950) can hardly be cited as parallels. On stepped pyramidal bases, see Mylonas in *Classical Studies in Honor of William Abbott Oldfather*, p. 127, who believes the form had a continuous evolution from pre-Hellenic times on. For this motif see also §§ 7, Nos. 6, 32, 35, 55; 14, No. 5; 35, Nos. 2, 4; 67; 76, No. 1; 84, No. 2a.

the blood from the sacrificed animals and will pour it into the pithos; this is barely possible, but it is more probable that the women are merely carrying olive oil, grain, must, or wine.⁴² (Cf. § 8, No. 8.)

8. Fragments of terracotta model of shrine, of which the lower level is solid with checkerboard pattern (ashlar blocks?) and the upper level consists of upright pillars. From Knossos. Cf. No. 9 for a similar model. *M.M. II.—P.M.*, I, fig. 166 (B and C). Fig. 57 B.

9. A sacred clay vessel from Karphi near Lasithi (transitional period, 1100-900) is called an altar by the excavators. It is rectangular (0.22 m. square in plan, 0.31 m. high) with a round mouth; doves are perched above, and each side consists of clay elements (with empty spaces between) in the form of sacral horns (on two sides), pillars (on one side) and a curious structure consisting of a stub column with wide flaring stepped moldings above and below (on each side).—*B.S.A.*, XXXVIII, 1937-38, pp. 84, 136, 140 f., pl. XXXIV. Fig. 58.

This vessel appears to be a stand for some sacred object, and must be a model of a larger shrine (No. 8). The peculiar type of sacral horns with a central element seen on one side is seen below [Nos. 12-24 (g), (h), with the parallels cited], and appears in two plaques from the Town Mosaic, where pillars also occur similar to the ones on this stand.⁴³ The stepped moldings of the column recall the curious design on a Mycenaean electrum vase (§ 14, No. 5). Somewhat similar stands are the snake cylinders and snake vessels (§§ 1-5).

[10.] In this connection mention is made of another structure identified as an altar by the excavators, but which appears to be rather the base of a

⁴² The rear of the sarcophagus shows a bull and smaller animals slaughtered. In the United States five-year-old bulls average 1600 lbs. on the hoof or 900 lbs. dressed, and have 8 gallons of blood; younger bulls have the same ratio of weight to quantity of blood. The ancient breed was probably smaller. See R. S. Kinsey, *The Bovine Elements in Greek Art and Literature*, Unpublished Johns Hopkins dissertation (1941), pp. 2 f.; Hatzidakis, *Eph. Arch.*, 1912, p. 231. Wine was undoubtedly known at this time; cf. *P.M.*, IV 2, p. 628; Daremberg-Saglio, *Dict. d. Antiq., s.v. Vinum*. Carbonized remains of grapevines were found at Thermi in Lesbos in town IV or V, 2700-2350 B.C.: H. Bancroft, *B.S.A.*, XXXIX, 1938-39, p. 89; cf. *Reallexikon der Vorgeschichte*, XIV, pp. 265 ff.

⁴³ *P.M.*, I, p. 304, fig. 223 (top, left), fig. 226 N; fig. 225a=*P.M.*, II 2, fig. 381 c, p. 608. For Oriental stepped designs on altars, see Vallois, *B.C.H.*, LVIII, 1934, pp. 442-447, figs. 49-51.

single pillar in antis.⁴⁴ It is in a shrine of the transitional period (1100-900) at Karphi, overlooking a precipice to the north: the structure in question (rubble, one course, *ca.* 0.70 m. by 0.50 m.) is at the northern end of the shrine, on its longitudinal axis.—*B.S.A.*, XXXVIII, 1937-38, pp. 75 f., 136 f., 140 f., pls. IX (plan), XVII 3.

11. A limestone offering stand (?) from Cyrenaica seems to be a model of a larger shrine, with a sacred pillar within and sacral horns above. Cf. § 7, No. 11.—Evans, *J.H.S.*, XXI, 1901, p. 115, fig. 9; cf. fig. 8.

12-24. Numerous seal impressions show human or divine figures before shrines: (a) columns enclosing a smaller sacred column and a sacred tree; (b) similar scene; (c) wall or colonnade enclosing sacred tree; (d) similar scene, but structure is topped by sacral horns; (e) enclosure of sacred tree, and crescent; (f) colonnade topped by sacral horn, surrounding a sacred column; (g) within a room (or a colonnade) a sacred column with sacral horns at the base (the same design is repeated three times in the gold model from Mycenae, § 12, No. 1); (h) a similar colonnade, surmounted by sacral horns, as the Mycenaean shrine just mentioned; (i) the L.M. I "Ring of Minos" represents five shrines of various types: a goddess sits on a cubical structure surmounted by sacral horns, a colonnade surrounds a sacred tree, a wall encloses a sacred tree, the barque carries two sets of columns [similar to (c) and (d)] topped by sacral horns.—Evans, "Mycenaean Tree and Pillar Cult", *J.H.S.*, XXI, 1901, pp. 170-193: (a) fig. 48; (b) fig. 53; (c) fig. 55; (d) fig. 56; (e) fig. 59; (f) fig. 63; (g) fig. 64 [cf. figs. 65, 66]; (h) *P.M.*, IV 2, fig. 597 A e p. 608; (i) fig. 917 p. 950; suppl. pl. LXV facing p. 949. Figs. 14, 15.

10. **Kernoi.** Kernoi have been specially studied elsewhere.⁴⁵ They persisted in Hellenic ritual with less change in form and purpose than

⁴⁴ The northern elevation of the shrine was probably that of a usual Minoan porch, which frequently had a single column: *P.M.*, III, plan fig. 264A p. 394 = Chapouthier, *B.C.H.*, LII, 1928, fig. 3 p. 296 (Mallia palace, southwest corner of the central court); *P.M.*, I, p. 214, plans figs. 158 (Knossos, west porch), 159 (Phaistos, west porch), 160 (Phaistos); II 2, pp. 802 f., 812-819, fig. 531, plan fig. 536 (Knossos, stepped porch on eastern side of central court); III, pl. XVI facing p. 47 (the "miniature fresco").

⁴⁵ Bosanquet, *B.S.A.*, III, 1896/7, pp. 57-61 (Cycladic kernoi); Xanthoudides, "Cretan Kernoi", *B.S.A.*, XII, 1905/6, pp. 9-23, figs. 1-6; and especially Nilsson, *The Minoan-Mycenaean Religion*, pp. 109-118; see also *P.M.*, I, pp. 71-103. Cf. Demargne, as cited in note 51.



A



B

FIGS. 14, 15. Seal Impressions. Roadside shrines enclosing sacred trees.
(§ 9, Nos. 14, 15)

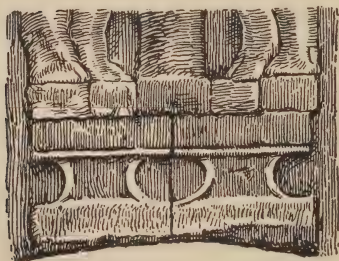


FIG. 16. Mycenae. Detail of relief over Lion Gate.
(§ 11, Nos. 1, 2)

any other class of Minoan cult apparatus. The general name embraces a very great variety of vessels used for offerings and libations: multiple jugs permanently attached to each other's sides; multiple mugs attached in the same way forming a tray; horizontal ring vessels with smaller vessels attached to the upper side, as in Cyprian examples; bottomless keroi are also known (cf. § 22). The various types of offering or libation trays discussed above (§ 7) probably fulfilled the same ritual function as keroi.

B. MYCENAEAN SITES

The first three classes below are similar in form and use to those of Crete.

11. Sacred Stands with Concave Sides.

1, 2. The column in the relief on the Lion Gate rests upon two objects which must be sacred stands with concave sides, used to support the sacred columns.—*P.M.*, II 2, p. 607, fig. 381 b; Rodenwaldt, *Die Kunst der Antike (Propyläen-Kunstgeschichte, III)*, p. 131. Fig. 16.

3. A gem depicts a similar scene with griffins, but with one stand.—Furtwängler, *Die antiken Gemmen*, III, p. 44, fig. 18.

4. A similar object is found in an imperfectly preserved Mycenaean painted plaque, in which two women face each other: a figure-eight shield representing a divinity is between them, and a stand with concave sides is beside one of the women. Considerations of symmetry suggest that another stand may have been placed beside the other woman also, but that portion of the painting is lost. The women have their hands in the attitude of adoration. As in Crete, the sacred stand with concave sides appears associated with a leading divinity.—Schuchhardt, *Schliemann's Excavations*, p. 293, fig. 288 p. 291; *Eph. Arch.*, 1887, col. 162, pl. 10.2 (colored); Tsountas and Manatt, *The Mycenaean Age*, p. 299, pl. XX opp. p. 294; *P.M.*, III, fig. 88 p. 135. Fig. 59.

5-7. Three examples of sacred stands with concave sides appear on other Mycenaean gems.—Furtwängler, *Die antiken Gemmen*, I, pl. III 23, 24; pl. IV 5; *P.M.*, IV 2, figs. 576, 577, p. 586.

8-10. Three examples are mentioned in § 12, Nos. 1-3; a doubtful example is mentioned in § 14, No. 5.

12. Roadside Shrines. The smaller shrines are seen in Nos. 1-3 (over a large shrine); examples of the larger shrines are Nos. 1-5. An actual sanctuary (No. 6) from the end of the Mycenaean era is presented for comparison. Two possible examples of smaller shrines are the two "hearths" at Berbati (§ 13).

1-3. In the Fourth Tomb at Mycenae a small gold model of a shrine was found: the lower level consists of a colonnade, the three intercolumniations of which each contained a sacral horn; above the central part was placed incongruously a smaller cubical shrine, surmounted by sacral horns. (The cubical element carried a design which has been considered related to the concave stands.) Two more similar shrines were found also.—Schliemann, *Mycenae and Tiryns*, pp. 266 f., fig. 423; Schuchhardt, *Schliemann's Excavations*, p. 199, fig. 183; cf. *P.M.*, II 1, p. 187, fig. 100; *ibid.*, II 2, p. 608, fig. 381 a. Fig. 17.

4. A massive gold signet ring from chamber tomb No. 10 (Late Helladic III, early, shortly after 1400) carries a representation of a Mycenaean shrine. It is an isodomic structure reaching above the waist of three worshippers, and behind it is a colonnade topped by sacral horns. (Behind one of the women is an object about knee-high, which seems to have a floral or fruit offering on it; the position of the woman's hand—touching the offering—precludes the interpretation of fire.—Persson, *New Tombs at Dendra near Midea* (1942), pp. 81, 132-135, pl. VII (1a, 1b, 1c); cf. p. 95 (dating). Fig. 18.

5. A somewhat similar shrine may be represented in a signet ring from Mycenae. Two columns are seen (probably four are meant), but without a central column; a sacral horn surmounts the shrine.—Evans, "Mycenaean Tree and Pillar Cult", *J.H.S.*, XXI, 1901, p. 184, fig. 58; Furtwängler, *Ant. Gemmen*, I, pl. VI 4.

[6.] At Asine, on the gulf of Nauplia, a sanctuary was found dating from the very end of the Mycenaean era, in a complex called the "Mycenaean Palace". It is a room 7 m. by 5 m., on the long axis of which are two column bases. Against the rear wall in the right corner was a wall bench of undressed stone slabs 1.60 m. by 0.50 m. in plan, and 0.57 m. high. On it, and fallen from it on the ground below it, were several vessels, small female idols, a stone axe, a painted head of marble 0.105 m. high. The bench is analogous to the raised level of the Shrine of the Double Axes at Knossos.—*Arch. Anz.*



FIG. 17. Mycenae. Gold model of larger shrine, surmounted by smaller shrine.
(§ 12, No. 1)



FIG. 18. Dendra. Signet-ring representation of shrine and colonnade.
(§ 12, No. 24)

XLII, 1927, cols. 378-380, figs. 9, 10; Nilsson, *Minoan-Mycenaean Religion*, pp. xx-xxii, pls. III, IV; Persson, *The Religion of Greece in Prehistoric Times*, p. 100, note, and Evans, *P.M.*, IV 2, p. 756, consider the marble head feminine.

In this sanctuary one may observe the transition from the Minoan-Mycenaean religion, which is represented by the bench on which were deposited various votive objects, including the female idols, to the Hellenic worship, which is represented by the male (?) head, which is larger than the rest. It appears that here the offerings consisted of votive objects or food offerings, rather than sacrificed animals, for no evidence of a hearth or an altar is seen.

13. Hearths. No proof of burnt flesh sacrifices is found either in the portable tripod hearths of Minoan type found at Mycenae and Tiryns, or in the permanent hearths in the megara at Mycenae and Tiryns, or in the household hearths in Korakou and Zygouries.⁴⁶ The portable hearths and the permanent hearths as well must have been used as the tripod hearths in Crete, that is, both for heating and ceremonial purposes. Ash heaps containing bones have been found in Early Mycenaean houses at Aigina and Thorikos, evidently the result of ordinary cooking.⁴⁷

The use of permanent hearths for ceremonial purposes is definitely attested late in Mycenaean culture. Two striking Late Mycenaean examples of such hearths occur at Berbati, in Argolis, where they are placed against the walls of two successive partially superimposed buildings.⁴⁸ The earlier one consisted of a rectangle of unhewn stones (*ca.* 0.95 m. by 0.65 m. in plan, and 0.20 m. high) on top of which was a large Mycenaean vessel. The later hearth (*ca.* 0.95 m. by 0.50 m. in plan and 0.15 m. high) was built against a wall perpendicular to the

⁴⁶ W. Lamb, *B.S.A.*, XXV, 1921-23, pp. 224-226, fig. 42, pl. XXXVII (tripod hearths at Mycenae); *ibid.*, pp. 241-244, fig. 48, pls. XXXIX, XL (the permanent hearth in the megaron at Mycenae); Rodenwaldt, *Tiryns*, II, p. 63 (tripod hearth at Tiryns); K. Müller, *Tiryns*, III, pp. 144 f., 157, 197 f.; and *Arch. Anz.*, XLII, 1927, col. 369, fig. 4 (permanent hearths in megara at Tiryns); Blegen, *Zygouries*, p. 120; *idem*, *Korakou*, pp. 80-96; in general, see *ibid.*, pp. 98 f.; Demargne, *B.C.H.*, LVI, 1932, pp. 76-83.

⁴⁷ Staës, *Eph. Arch.*, 1895, p. 247.

⁴⁸ Persson and Akerström, "Zwei mykenische Hausaltäre in Berbati" in *Arsberättelse* (Bulletin de la Société Royale de Lettres de Lund), 1937-38, pp. 59-63, figs. 1-6. Cf. *P. M.*, IV 1, pp. 359 f., where religious significance is attached to Late Minoan "pedestalled goblets".

earlier wall, and consisted of stones and a large slab, with the foot of a Late Mycenaean stemmed goblet between and under the stones. The earlier hearth was probably in the interior of a building, and the later hearth was certainly in the interior of a building. Proof of the religious use of the hearths is afforded by the fact that two female idols were found near the earlier hearths, and another one, in fragments, near the later hearth. Numerous vase fragments were found near both hearths. The vessels found at the hearths show clearly that libations or food offerings were made there. It is even possible that these two structures are not hearths at all but small shrines used exclusively to receive libations and food offerings.

Very similar permanent hearths for ceremonial or religious use are found from the Neolithic age to the close of the second millennium in regions of non-Mycenaean and non-Minoan culture (§§ 16-18). It can be said, therefore, that these Late Mycenaean ceremonial hearths derive structurally from the non-Hellenic peoples which inhabited Greece before the advent of the Mycenaeans. It may be equally correct to say that the ceremonial hearths derive from the common household hearths. It is probable that the ritual associated with the Minoan tripod hearth was also practised at the permanent hearth.

14. Ceremonial Fires at Tombs. There are other indications that Mycenaean religion used ceremonial fires and thus was acquiring elements later associated with burnt flesh sacrifices. This is seen especially in the presence of ceremonial fires at tombs. Evans and others have shown that at least in some cases the purpose of such fires was not sacrificial but purificatory.⁴⁹ (A sanctuary with no hearth or altar or facilities for ceremonial fires is discussed above, § 12, No. 6.)

1. In the Treasury of Minyas under the fallen blocks of the dome Schliemann found superimposed layers of ashes and other burnt material twelve feet deep, which can be explained as the result of ceremonial fires.—

⁴⁹ Evans, *The Shaft Graves and Bee-hive Tombs of Mycenae*, pp. 3 f.; at Knossos incense was found among the debris of a tomb: cf. *idem*, "The Tomb of the Double Axes, etc.", *Archaeologia*, LXV, 1914, p. 13; cf. p. 28. For a discussion of occasional fumigation of Late Helladic tombs, see Blegen, *Prosymna*, pp. 250-252, with further references; cf. especially Persson, *The Royal Tombs at Dendra near Midea*, pp. 68-70. Nilsson, *Minoan-Mycenaean Religion*, pp. 523 f. believes fires, but not sacrifices, were normally associated with Mycenaean tombs. See also Tsountas, *Eph. Arch.*, 1888, cols. 129-136.

Schuchhardt, *Schliemann's Excavations*, p. 301; Schliemann, *Mycenae and Tiryns*, p. 214.

2. Several other chamber tombs at Mycenae had animal and human bones in the dromos, and evidence of quite small fires was found in virtually all of 43 tombs excavated.—Tsountas, *Eph. Arch.*, 1888, cols. 130-136.

3. Remains of similar ceremonial fires were found in tholos tombs at Messara and Dhimini. At the latter place bones were also found, although it is not clear that they are connected with the fires.—Xanthoudides, *The Vaulted Tombs of Messará*, pp. 6, 26, 129; Evans, in Xanthoudides, *op. cit.*, pp. xi f.; Lolling and Walters, *Ath. Mitt.*, XII, 1887, p. 138.

4. For similar fires at Menidhi, see *Eph. Arch.*, 1888, col. 130.

[5.] There is a doubtful representation on an electrum vase of a low concave stand with handles, with flames rising from it. It may equally well be a log pyre.—Karo, *Die Schachtgräber von Mykenae*, Text, p. 94; Plates, pls. CXII f.

15. Walled Pits. Among the most extraordinary finds from Mycenae and Tiryns were two structures consisting of a round rubble wall in the form of a well-eye, dating before the end of Mycenaean times.⁵⁰ These two structures have been called sacrificial pits. Perhaps offerings and libations were made at the pits, in honor of heroised kings buried there. But if sacrifices had been performed there, ashes or other evidence would have survived. Although the pit at Tiryns was probably used as a chthonic well altar in the eighth century, the function of the structure need not have been the same in both periods. For the Hellenes would quite naturally put to new use such a convenient structure, which would be surrounded by the aura and awe of hallowed antiquity. Walled pits, therefore, may be considered antecedents of well altars only in the purely structural sense.

1. The walled pit at Mycenae (4 feet high, 7 feet wide north-south, 5½ feet wide east-west) was over Grave 4 which had been covered with a layer of dirt 15 feet thick. Probably Early Mycenaean. The masonry is reported by Schliemann as consisting of two concentric rings, with a wide opening down the middle. It was probably, but not certainly, all above the

⁵⁰ Cf. Wace, *B.S.A.*, XXV, 1921-3, pp. 112 f., 122.

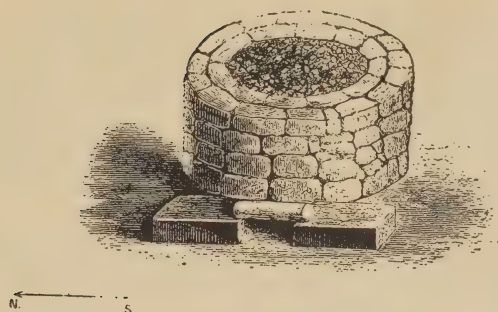
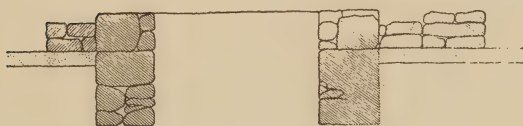


FIG. 19. Mycenae. Walled pit.
(§ 15, No. 1)



SCHNITT A-B

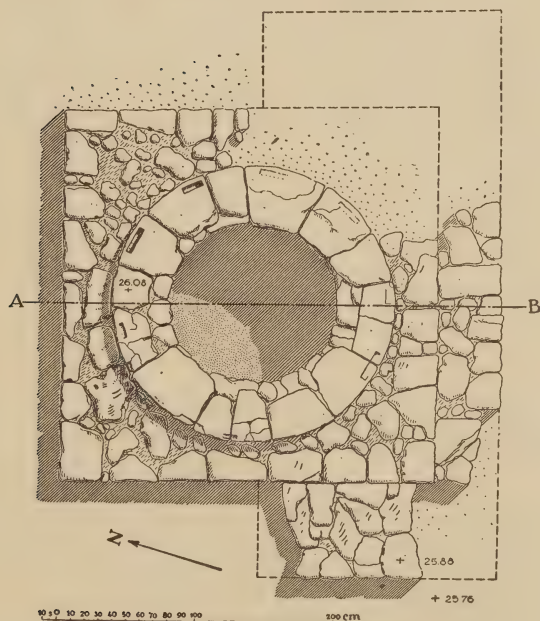


FIG. 20. Tiryns. Walled pit.
(§ 15, No. 2)

level of the ground. Schliemann reported that ashes and animal and human bones were found at the structure, but their exact position is not clear, nor whether they could have come from the tombs. The altar was demolished during the course of the excavation of the graves. (To the side and below the pit was a small grotto, as determined by Keramopoulos.⁵¹)—Schliemann, *Mycenae and Tiryns*, pp. 212-214, Plan F; cf. Nilsson, *Minoan-Mycenaean Religion*, pp. 531 f. Fig. 19.

2. The structure at Tiryns was in the middle of the court of the men's apartments, exactly on the longitudinal axis of the megaron. It consisted of two parts: a circular rubble construction now 0.80 m. high and 2 m. in diameter; and a later platform 2.70 m. square and 0.35 m. high, which was still later enlarged on the south and west sides and probably on the east side. Clamp marks indicate that the circular structure originally carried another course, of which one block has been found. This course extended above the platform, which rested on the floor of the court. The lower part of the circular structure was below the level of the ground, lining the pit; the interior was not as carefully finished as the exterior, but that need not mean, as has been claimed, that the interior was filled. (Frickenhaus and Müller believe that the later structure built inside the megaron, with one wall in common, is a late geometric or early archaic temple of Hera, and that the walled pit was probably still in use for sacrifices. Blegen, however, has shown good reasons for believing that this later structure was of very late Mycenaean date, and did not survive into the archaic period. In that case the walled pit also might have disappeared by that time.)—Schliemann, *Tiryns* (New York, 1885), pp. 337-340, figs. 138 (inaccurate), 137; Schuchhardt, *Schliemann's Excavations*, pp. 106-108 (fig. 101 is inaccurate); Frickenhaus, *Tiryns*, I, pp. 6 f., 31-41; Blegen, *Korakou*, p. 133; Müller, *Tiryns*, III 1, pp. 136 f., 215, fig. 64; III 2, pl. 42; Dörpfeld, *Ath. Mitt.*, XXX, 1905, p. 152. Fig. 20.

C. OTHER AEGEAN SITES

16. Neolithic Ceremonial Hearth. The earliest ceremonial hearth on the mainland (Neolithic II) occurs at Dhimini in Thessaly.⁵²

⁵¹ *Eph. Arch.*, 1918, pp. 56 f. Keramopoulos believes that libations, but not burnt flesh sacrifices, took place there; he also believes that the pit was to the side of the grave, near the cavity in the rock. Demargne, *B.C.H.*, LVI, 1932, pp. 69-74, compares these walled pits with the earlier Minoan fixed libation trays (§ 7, esp. No. 6) and kernoi.

⁵² Tsountas, *Ai Proistorikai Akropolis Dhiminiou kai Sesklou*, col. 58, pl. II (square 4Z, broken lines); cf. cols. 27 f.

Slight remains of square walls forming a rectangle with much ash were found there, but are no longer extant. Since the structure was located in a wide circular enclosure too large to be spanned by a roof, it has been considered an altar. The available evidence indicates only that the structure was a hearth for ceremonial purposes, such as the preparation of tribal feasts.

17. Helladic Household Hearths and Refuse Pits. Numerous Helladic sites have yielded examples of household hearths, either paved or merely heaps of ashes on the floor.⁵³ Numerous examples, also, are known of *bothroi*, that is, rock-cut pits or pits dug in the ground, in the latter case often lined with clay, located inside houses or in the open. They are sometimes used as ovens,⁵⁴ but usually as refuse deposits, especially of ashes.⁵⁵ A common means of disposing of the ashes from household hearths was to bury in pits the ashes and any other objects which were in the ashes. Both hearths and *bothroi* are often considered to have sacrificial use. This attribution is, however, entirely conjectural, since the presence of burnt bones in the ashes of the hearths or the *bothroi* does not point especially to sacrifices. In view of their casual construction, the variation in form and location, and the lack of any other evidence, it is more natural to believe that neither hearths nor *bothroi* were closely associated with burnt flesh sacrifices, although other rites and even simple food offerings connected with fire, undoubtedly took place at hearths and *bothroi*.⁵⁶ It will be sufficient, therefore, to mention some of the Helladic sites at which hearths and pits have been found.

1. Macedonia. For Neolithic, Bronze, and Iron Age hearths and *bothroi*, see Heurtley, *Prehistoric Macedonia*, Index, *s.v.* house.

⁵³ For a general discussion of the Minoan and Helladic household hearth, see Demargne, *B.C.H.*, LVI, 1932, pp. 76-88, where further references.

⁵⁴ Mylonas, *op. cit.*, Append. II, pp. 161-164, shows that *bothroi* were also used as ovens; cf. *idem*, *Olynthus*, I, p. 18.

⁵⁵ See Hutchinson, "Bothroi", *J.H.S.*, LV, 1935, pp. 1-19. The term *bothros* is applied to refuse pits, storage pits, or sacrificial pits.

⁵⁶ On the sanctity of hearth ashes, see Bulle, *Orchomenos*, I, (Abh. Bayerl. Akad., Philos.-Philol. Kl., XXIV, 1907, pt. 2), pp. 30-34; Nilsson, *Geschichte der griech. Religion*, I (Müller Handb.), pp. 77 f., section on "Heiligkeit der Opferreste (Aschenaltäre)".

2. Dhimini. Neolithic hearth, and two refuse pits, which probably received the roof posts. Megaron A, room 3.—Tsountas, *op. cit.*, pp. 50 f., plan fig. 9.

3. Orkhomenos. Nearly 50 Middle Helladic bothroi were found both in and outside oval apsidal houses.—Bulle, *Orchomenos*, I (Abh. Bayer. Akad., Philos.-Philol. Kl., XXIV, 1907, pt. 2), pp. 25-36, pls. IV, V (plans), XIII-XVI; Montelius, *La Grèce préclassique*, pp. 132 f.; Dussaud, *Civilization préhellénique*, p. 182.

4. Eutresis. Sixteen hearths were found dating Early Helladic to Late Helladic, of which five are adjacent to the wall. In an unusually large room, identified as a cult room (Early Helladic II), a bull rhyton was found, and an ordinary hearth and a refuse pit in the floor. The room also contained a rectangular rubble bench, and a round clay disk 1.20 m. in diameter, imbedded in the floor, showing signs of burning and having fragments of animal bones on it.—H. Goldman, *Excavations at Eutresis in Boeotia*, pp. 21, 27, 30, figs. 17-19, 28, 34 (the hearths); pp. 17-20, fig. 13 (the cult room).

5. Thermi. Remains of 344 hearths and of 72 refuse pits were found (Early Bronze Age, ca. 3200-2400).—W. Lamb, *Excavations at Thermi in Lesbos*, pp. 54-60 (by Hutchinson); pp. 61-64, 211.

6. Tsoungiza, Bronze Age site at Nemea. Thirteen E.H. I bothroi (in E.H. II, pithoi instead).—Harland, *A.J.A.*, XLII, 1938, p. 121.

18. Helladic Shrines at Malthi-Dorion. At Malthi-Dorion in Messenia two sanctuaries were found of great interest for the evidence they provide in the study of ceremonial fires. Both shrines were in use from the E.H. II period to the end of the L.H. period, probably 1000 B.C. Although Mycenaean influence was strong, Malthi-Dorion exhibited a culture of its own, with a strong persistence of pre-Mycenaean elements.⁵⁷ Numerous pottery fragments were found in both sanctuaries.

The Double Sanctuary consists of two rooms, each with a stone column base on the longitudinal axis.⁵⁸ Near their common wall was found on either

⁵⁷ See Valmin, *Swedish Messenia Expedition*, pp. 398-411, where also the general chronology is discussed.

⁵⁸ *Ibid.*, pp. 126-131, fig. 23; on plan III the rooms are marked C1 and C2.

side a large flat stone slab in a thick layer of ashes and carbonized wood. The slab in the western room was 1.20 m. by 0.88 m. in plan, 0.32 m. thick, and lay 0.90 m. from the wall. The slab in the eastern room was 1.40 m. by 0.85 m. in plan, 0.40 m. thick, and lay 2 m. from the common wall. In the floors of these rooms exceptionally rich finds of potsherds of many kinds were made, extending from E.H. to L.H. The excavator believes that this sanctuary was connected with the worship of the person buried nearby in the E.H. grave and the other two later graves near it in the Grave Circle.⁵⁹ It is natural to believe that ceremonial or purificatory fires took place here, but there is no evidence for sacrificial use of the fires. These L.H. slabs appear to be simple hearths, rather than the precursors of Hellenic ground altars.

The other shrine at Malthi-Dorion, called the Ceremonial Room, was in use from M.H. II to L.H. III, as is shown by the very rich finds of pottery in the floor.⁶⁰ The Ceremonial Room is one of the largest rooms of the entire city, and is on top of the hill. One column base was found in the room, but evidently not *in situ*. Against the rear wall of the room there is a semi-circular hearth whose diameter is 1.75 m. It consists of small upright slabs bounding the hearth floor which was constructed of two large slabs cracked by the heat. The position of this hearth against the wall is analogous to that of the two slabs at the Double Sanctuary. This hearth is by far the largest and most impressive of the many hearths found at Malthi-Dorion, and its presence in this room leads the excavator to believe that the room and the hearth were used for ceremonial occasions.⁶¹

These hearths had some religious significance, but since no votive objects or objects of cult apparatus were found associated with the hearths, it appears that the hearth did not perform a leading part in the ceremonies. The absence of a hearth from the cult room at Eutresis (§ 17), and from the Sanctuary of the Double Axe at Malthi-Dorion ⁶² shows that the ceremonial hearth was not a necessary part of Helladic religious apparatus, as it also was not at the Late Mycenaean sanctuary at Asini (§ 12, No. 6). This fact, and the absence of any evidence for sacrifices in the cases where ceremonial hearths did exist, show that, although ceremonial hearths were known in non-Mycenaean culture

⁵⁹ See *ibid.*, pp. 190 f.

⁶⁰ *Ibid.*, pp. 78-83, figs. 19-21; marked A1 on plan III.

⁶¹ For the Sanctuary of the Double Axe at Malthi-Dorion, where, however, no kind of altar was found, see *ibid.*, pp. 178-180.

⁶² *Ibid.*

from the Neolithic age to the end of the second millennium, sacrifices were not a normal part of Helladic cult, if they were known at all.

19. Three-Legged Pots. Three-legged pots occur scattered throughout the Aegean. Some have the shape of hemispherical cauldrons with short legs growing from the bottom of the pot, while others with a similarly shaped body, have legs which begin from the upper rim of the body and are attached to it throughout their entire length.⁶³ Pre-Hellenic examples are found in Enkomi and elsewhere in Cyprus,⁶⁴ Thessaly,⁶⁵ Troy,⁶⁶ Olynthus,⁶⁷ and elsewhere. There is no evidence outside of Crete for considering any of these three-legged pots even as portable hearths, and there is no reason to consider that they are altars.⁶⁸

20. The Troad. At Thymbra was found a low hearth consisting of one course of bricks and ashes, considered by the excavator an altar.⁶⁹

At Troy, at about the level of City III (early second millennium) Schliemann reported a large stone altar consisting of a baked brick foundation in the shape of a truncated quadrangular pyramid, on the upper surface of which was set a slab of slate-granite *ca.* 5¼ ft. long and 5½ ft. broad.⁷⁰ The upper side of this slab had a crescent-like depression, which was interpreted by Schliemann as intended to receive the neck of the victims. Bricks and wood-ashes surrounded the altar to a height of 10 ft. Recent excavations⁷¹ by Semple and Blegen have revealed an "altar-like stone" surrounded by a sacred area, from City VI (first half of second millennium to Late Helladic III). This is located inside the

⁶³ Cf. Benton, "The Evolution of the Tripod Lebes", *B.S.A.*, XXXV, 1934-5, pp. 74-130.

⁶⁴ *S.C.E.*, I, plates, pls. CXXX, CXXXII, CLI.

⁶⁵ Wace and Thompson, *Prehistoric Thessaly*, p. 107, fig. 57.

⁶⁶ Schliemann, *Ilios*, pp. 357-363, figs. 252-281.

⁶⁷ Mylonas, *Olynthus*, I, pp. 25-27, where further references.

⁶⁸ A somewhat similar object from the northern part of the Balkan peninsula in the third millennium is interpreted by Childe, *The Danube in Prehistory*, p. 70, as an altar and libation table, but on what evidence is not clear; cf. *ibid.*, pp. 28, 70 for other examples.

⁶⁹ Schliemann, *Ilios*, pp. 715 f.

⁷⁰ *Ibid.*, p. 30, fig. 6 p. 31; cf. p. vii; Schliemann, *Troy and its Remains*, pp. 277 f., 291, fig. 188, Plan 2 (No. 14); cf. Dörpfeld, *Troja und Ilion*, pp. 26-35.

⁷¹ *A.J.A.*, XXXVII, 1933, pp. 493 f., fig. 1; Blegen, *A.J.A.*, XXXVIII, 1934, pp. 241 f., fig. 18.

wall near the South Tower, while along the outside of the tower, there is a row of four baetyls, the highest 1.04 m. The existence of these altars at such an early date indicates a substantial difference in religious practices from those of Greece.⁷² Schliemann's altar was evidently borrowed from the interior of Asia Minor: a related type of altar is found in Hittite Asia Minor.⁷³

21. Summary of the Pre-Hellenic Period in the Aegean Sphere. The pre-Hellenic ritual apparatus and structures which were used in connection with offerings to divinities, or which might have been used for sacrifices, have been examined above. It is clear that fruit offerings, liquid offerings or libations, and other bloodless food offerings figured prominently in Minoan and Mycenaean ritual, and probably in Helladic ritual. But there is no convincing evidence that altars for burnt flesh sacrifices were known in pre-Hellenic religion, nor that burnt flesh sacrifices were practiced. If burnt flesh sacrifices had been normal practice, evidence of this would occur frequently and regularly in pictorial representations, in the existence of carbonized and ash remains at shrines, and in the frequent occurrence of structures suitable for the burning of flesh offerings.⁷⁴ Furthermore, the evidence indicates, if anything, that Minoan-Mycenaean religion was not evolving in the direction of burnt flesh sacrifices, since the fires in Mycenaean tombs were not sacrificial. Minoan-Mycenaean religion, therefore, did not contain the religious concepts which inspired Hellenic sacrifices, nor did Minoan-Mycenaean religious architecture contain the structural elements which inspired Hellenic altars.

On the other hand, after the Hellenic sacrifice and the Hellenic altar had made their appearance, they reached out and adopted or adapted a few old Minoan-Mycenaean structural and ritual elements. Thus, walled pits were retained with practically no structural change,

⁷² But cf. Blegen, *A.J.A.*, XLVI, 1942, p. 121.

⁷³ Galling, *Der Altar in den Kulturen des alten Orients*, pl. 15, Nos. 1-3.

⁷⁴ Sacrificial use has usually been attributed to three types of structures, mostly because of their resemblance to Hellenic altar types: walled pits (§ 15), smaller shrines (§§ 9, 12), and sacred stands with concave sides (§§ 8, 11). But actually none of these structures had sacrificial use; the resemblance to Hellenic altars is quite vague in the case of the shrines, and is infinitesimal in the case of the stands.

and were used as chthonic well altars. The tripod hearths and ceremonial hearths gave way to hearth altars in the Hellenic period. These ceremonial fires undoubtedly contributed ritual procedures to the Hellenic sacrifices; later traditions imply this strongly, but details are conjectural. Minoan-Mycenaean wall benches evolved into offering tables, and kernoï remained in use with little change throughout. Sacred mounds also were known in both eras, but the connections are obscure; in any case libations, but not sacrifices, are attested on Minoan mounds.^{74a}

D. CYPRUS, NEOLITHIC AND BRONZE AGES ⁷⁵

22. Khirokitia and Vouni Cemeteries. In a Neolithic burial enclosure at Khirokitia in south-central Cyprus, objects were found which may be crude sacrificial tables, and near them, remains of animal bones in carbonized layers.⁷⁶ The frequent occurrence of similar

^{74a} On the representations of various types of pre-Hellenic sacred mounds, and the various types of Hellenic mounds including omphaloi, see Mylonas, "The Lykaian Altar of Zeus" in *Classical Studies in Honor of William Abbott Oldfather*, pp. 122-133, with further references; Evans, "Mycenaean Tree and Pillar Cult", *J.H.S.*, XXI, 1901, pp. 117-123; cf. *P.M.*, IV 2, pp. 606-610, fig. 597A e.

⁷⁵ The most recent comprehensive account of Cyprus is by George Hill, *A History of Cyprus, I, To the Conquest by Richard Lion Heart* (1940), which provides bibliography and thorough documentation. The following chart for the Bronze Age is given on pp. 22 f.: Early Cypriote I, II, III, 2600-2100; Middle Cypriote I, 2100-1900; II, 1900-1750; III, 1750-1600; Late Cypriote I, 1600-1400; II, 1400-1200; III, 1200-1000; the racial composition of Cyprus in the Bronze Age is discussed *ibid.*, pp. 23 f. Also valuable is Casson, *Ancient Cyprus, Its Art and Archaeology* (1937). *The Swedish Cyprus Expedition* (Stockholm, 1934-), 3 vols. of text and 3 vols. of plates, is the most complete collection of excavation reports, but vol. IV, which will give the full conclusions of the expedition, is not yet available. Gjerstad, *Studies on Prehistoric Cyprus* (Uppsala Universitets Arsskrift, Uppsala, 1926) is the most systematic outline of the remains of the Bronze Age. The most recent general summary available is by P. Dikaios, *Report of the Department of Antiquities, Cyprus*, 1936, Part I (Nicosia, 1938), pp. 63-80, where (p. 71) Neolithic I, II, III is dated 4000 to after 3300; Chalcolithic, after 3300 to about 2900; Copper Age, Transitional, about 2900 to about 2700; Early Cypriote, beginning about 2700. Cf. also Gjerstad, "The Initial Date of the Cypriote Iron Age", *Opusc. Archaeol.*, III (Acta Inst. Rom. R. Sueciae, X), 1944, pp. 73-106; Daniel, *A.J.A.*, XLII, 1938, pp. 261-275, esp. p. 269; Shaeffer, *A.J.A.*, LII, 1948, pp. 175 f. (L. C. chronology).

⁷⁶ Hill, *op. cit.*, p. 55. "Bones of sacrificed horses" were found in a grave of about 2000; *ibid.*, p. 35.

tables for unburnt offerings in later Cyprian shrines supports the probability that here the tables received offerings to the dead in the form of burnt flesh sacrifices. Until the first millennium, this is the only direct evidence for burnt flesh sacrifices in Cyprus.

At the cemetery of Vouni in north-central Cyprus, which dates not later than Early Cypriote, very rich pottery finds were made.⁷⁷ There were several types of vases of fantastic shape which were evidently connected with the cult of the dead.

The first type consists of seven vessels of odd shape which communicate with each other, combined in an exotic manner: three are larger vessels in the shape of gourds and have spouts which extended upward to support another similar vessel, while three smaller vessels, which have a pouring lip divided into three parts, as does the upper one also, rest between the three larger vessels.⁷⁸ Another type is in the form of a hollow ring on four hollow legs, from which spring four oddly shaped vessels.⁷⁹ In one case another vessel in turn springs from one of the upper vessels. Besides the incised ornament, some vessels of this type have attached various animal and human figures in relief or in the round. A third type consists of four bowls again supporting an object above them, in one case a human figure, in another, a jug. A fourth type is a small terracotta libation table consisting of a slab with a single support below, and two small bowls and a jug above, all these being formed of a single mass of clay.

Since none of these vessels could have served a practical purpose, it is conjectured that they were used to pour libations to the dead. This is practically certain with the second type, since liquid poured in the vessels ran out through the legs. The identification of this type of

⁷⁷ Dikaios, *Syria*, XIII, 1932, pp. 345-354, esp. pls. LXXIV 6, LXXVI 1; *idem*, *Ill. Lond. News*, Oct. 31, 1931, pp. 678 f.; Dec. 5, 1931, pp. 891-893; Dec. 10, 1932, pp. 928 f.; Schaeffer, *Missions en Chypre*, pp. 26-48, pls. XI-XVII; summary in Hill, *A History of Cyprus*, I, pp. 56-58. From the Cyprian examples are derived the Palestinian examples of the second half of the second millennium: for a brief discussion see May and Engberg, *Material Remains of the Megiddo Cult*, pp. 17 f.

⁷⁸ *Ill. Lond. News*, Dec. 5, 1931, figs. 6, 7 p. 893; Hill *op. cit.*, pl. IIa following p. 58.

⁷⁹ A number of similar vessels are in the Cesnola Collection; nos. 900-902, with red fabric and pink slip, have five (nos. 900, 901) and nine (no. 902) vessels attached; nos. 521-523, of which no. 521 has two vessels attached and two animal heads, the latter without opening (Myres, *Handbook of the Cesnola Collection*, pp. 68, 109 f.).

vessels as cult objects is further strengthened by the fact that a similar vessel is included among the votive objects found at the Idalion Sanctuary. The bottomless vessels described above antedate their Minoan counterparts. Thus, libations to the dead are encountered in the third millennium, a pre-Hellenic practice which continued in use with undiminished force until the end of paganism. Perhaps at Eleusis the kernos had originally been used in a ritual which portrayed a burial as symbolic of the death (and subsequent rebirth) of nature.⁸⁰ In any case, these vessels belong to the same class as the Late Helladic kernoi from Crete and Melos and are related to Hellenic Kernoi (cf. § 10).

23. Rustic Sanctuaries. Cyprian rustic sanctuaries adhered approximately to a single type throughout the second and first millennia: at a pleasant spot in the country, on a hill-top or near a stream, a hypaethral or roofed shrine and an offering table or altar were built in an enclosed or walled precinct with an open court for the rustic gatherings, which might also contain buildings for priests' dwellings or storehouses. One such sanctuary of the fourth millennium and four such sanctuaries of the second millennium are examined below, §§ 24-28, and four of the first millennium are examined in Chapter II.⁸¹

24. Khirokitia Khan Sanctuary. At Khirokitia Khan a trial excavation has revealed what is evidently a sanctuary, consisting of a round building surrounded on three sides by a circular and a straight wall.⁸² Three strata contain Neolithic I and II material, including two stone idols in fragmentary condition. The building is 9.40 m. in diameter; its wall is 2.00-2.70 m. high and 1.30-1.60 m. thick. Approximately in the center of the building are two parallel rectangular rubble structures, about 1.20 m. apart, measuring 2.05-2.20 m. by 1.30 m. in plan and 1.40 m. high. On top of each is a depression, evidently rectangular (0.90 m. deep and 0.70-0.80 m. wide, and extending across the middle of the structure along its short axis) so that the upper two thirds of each structure consist of two smaller pillars. The sides of the depressions are faced with thin gypsum slabs. Before the two structures was

⁸⁰ Cf. J. Harrison, *Prolegomena*,² pp. 158-160, fig. 15.

⁸¹ Cf. Ohnefalsch-Richter, *Kypros, The Bible and Homer*, text, p. 225; pp. 227 f. this type is compared with the sanctuaries of the Hebrews.

⁸² Preliminary report by Dikaïos, *Report of the Department of Antiquities, Cyprus*, 1936, Part I, pp. 82-87, plan fig. 1; cf. pp. 69-71.

a platform of stone, below the center of which and near the structures was found a human skeleton. Charcoal and stones showing signs of burning were found under the stones of the platform; it is not clear whether this may be part of the carbonized remains of the roof, such as are found elsewhere in the building. Two more skeletons were found on either side of the western structure, and one to the east of the eastern structure.

Until fuller publication and study is provided by the excavator, Dikaïos, it can be said only that the general aspect of the building indicates a shrine, most of which was taken up by the two rectangular structures. This is also suggested by the position of the skeletons (although burial in houses was common⁸³), and the idols. The two structures evidently had some ceremonial use, either as stands for fetishes or as supports for tables of offerings. They do not appear to show traces of fire.

25. Nitovikla Sanctuary.⁸⁴ The earliest site in Cyprus at which remains of a possible altar have been found is at the fortress of Nitovikla, on the northeast part of the island, which was occupied for three periods, dating Middle Cypriote III A to Late Cypriote I B.⁸⁵ It was fortified during periods 2 and 3.

The inner fort of Nitovikla is situated within a larger walled area. Originally the inner fort was approximately 40 m. square, surrounded on all sides by massive ramparts with walls as thick as 2.28 m. Around the inner court, rooms and casements were built against the walls. One of the rooms is identified as the kitchen. In the middle of the court, apart from any other constructions, there are remains of an "altar" which was in use in period II

⁸³ Cf. *ibid.*, pp. 11, 19, 58-62.

⁸⁴ In the reports of the Swedish Cyprus Expedition periods of occupation are given Arabic or Roman numerals, according to the stratigraphy, starting with the lowest level. When there are two building periods at the same stratigraphical level, they are designated by letters as subdivisions, e.g. III A or 3 A and B. On the pottery from Nitovikla, cf. Schaeffer, *Missions en Chypre*, pp. 62-64.

The very completeness of the *S.C.E.*, and the inadequate number of cross references and summarizing sections, render the *S.C.E.* quite cumbersome to use. It has been advisable, therefore, to reproduce information from this publication rather extensively.

⁸⁵ *S.C.E.*, I, text, pp. 371-407; for the chronology, see pp. 406 f.; for the general aspect of the fortress, see pp. 394-403 and drawings figs. 157, 158; for the list of finds, see pp. 404-406.

(Middle Cypriote III B and C), and presumably in period III (Late Cypriote I A and B). The remains consist of the imperfectly preserved lowest rubble course of an altar which was *ca.* 0.75 m. square in plan. Its original height is unknown. The altar is not included in the excavators' discussion of the types of walls.⁸⁶

The altar is so identified only by analogy from later sites, of the same millennium and of the following millennium; the identification, therefore, must be considered conjectural. Nowhere in the fortress were any finds made other than potsherds, which were fairly numerous in the vicinity of the altar.

26. Agios Iacovos, Bronze Age Sanctuary. The Bronze Age Sanctuary at Agios Iacovos, in the northeast part of the island, was a small circular precinct not delimited by a wall,⁸⁷ which contained two rubble podia and refuse and deposit pits. Fig. 21.

The sanctuary is about 10.10 m. in diameter, and is traversed from north to south, slightly to the west, by a low wall of poor construction, not extending entirely across the precinct. To the east of this wall were two cylindrical "podia" of rubble, the northern one 2.62 m. in diameter, the southern one 1.12 m. in diameter, each 0.95 m. high, of which 0.45 m. is above the floor.⁸⁸

Below the level of the floor near one "podium" was a rock-cut pit which was filled with ashes and potsherds. Since the floor of the temenos extended unbroken over the pit, the pit must be a remnant of an earlier use of the sanctuary. On the other side of the transverse wall in a shallow pit in the rock there was a large terracotta basin shaped like a bathtub. It was 1.29 m. long by 0.63 m. wide by 0.47 m. high, average thickness 0.05 m. The sides extended 0.33 m. above the floor. Near it were two other small pits. Most of the finds were made in this area: 59 objects in all were found, among which were 6 terracotta incense burners, 19 gold objects, three cylinder seals, and 12 silver objects. No objects were found on the same side of the transverse wall as the podia.

A *terminus post quem* is provided by the material from the pits which is Middle Cypriote III. Since no material which is certainly L.C. I was found there, the sanctuary was not in use in that period. Finds on and immediately above the floor are L.C. II, rather early, and an engraved ring has the cartouche of Thotmes III. The sanctuary is thus dated in the fourteenth century.

⁸⁶ *Ibid.*, p. 383.

⁸⁷ *Ibid.*, pp. 356-361, plan XIII, figs. 134-137.

⁸⁸ Cf. *ibid.*, plan XIII.

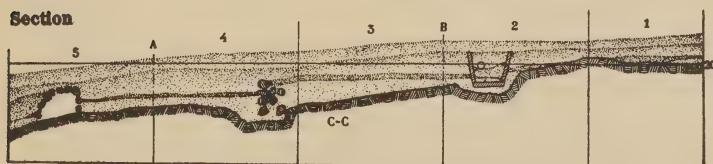
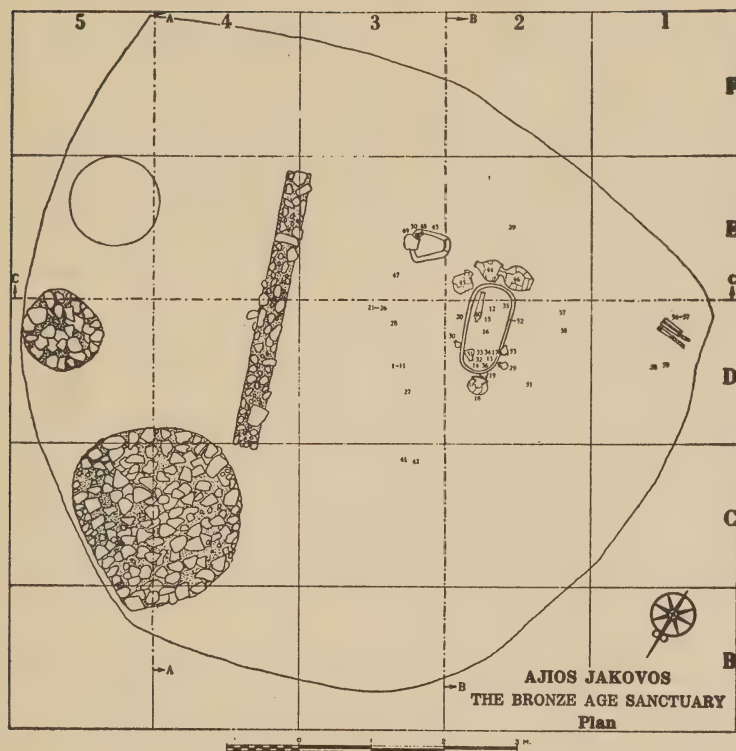


FIG. 21. Agios Iakovos, Bronze age sanctuary.

(§ 26)

From the objects found, it appears that the area was a sanctuary. The objects found were probably a votive deposit, and the excavator believes that the podia are altars. No ashes were found near them, but none could be expected in any case, since they were covered by only a very thin layer of earth. The absence of any evidence for sacrifices in the ash deposit from the earlier period may indicate that the podia were used as stands for ceremonial fires, rather than for burnt flesh sacrifices. It is most probable, however, that the podia were offering tables, though it is possible that one podium may be an altar or a stand for ceremonial fire, and the other, an offering table or an accessory stand used in the ritual.

Though the existence of two podia is puzzling, this does not prevent their being identified as stands for ceremonial fires or as offering tables. The same arrangement (without the transverse wall) was found at the Khirokitia Khan sanctuary (§ 24). It is probable that two divinities were worshipped there, or even that two ceremonial fires side by side to the same divinity were merely a sign of especial devotion. Two offering tables are found at the Agia Irini Sanctuary (§ 28), and two altars in the following millennium at Idalion and Kition (§§ 39, 40).

27. Idalion. The Western Acropolis of ancient Idalion, south of the modern village of Dali in the center of Cyprus, was a small fortified settlement with a cult house which was occupied continuously during L.C. III A, B, and C, (periods 1-3) and again after a break in continuity from Cypro-Geometric III to 470 (periods 4-6).⁸⁹

In period 1 (Late Cypriote III A) the acropolis was a fortified stronghold defended by a massive wall which is preserved on the northwest and southwest slopes. The settlement was concentrated in the southwest part of the acropolis: a unit of houses of approximately six rooms was nearly against the north face of the wall; in front of the southern end of this row of houses was the "priest's house" of two rooms, and at the center of the settlement,

⁸⁹ *S.C.E.*, II, text, pp. 460-628, plans XIV-XXI. (Periods 4-6 are treated below, § 39.) For altar 105 see p. 492, plan VI location L 7, fig. 228; it does not appear in sections V and XII (plans IX and XI, respectively). For the libation jugs see pp. 593, 571, 543 (Nos. 423, 424); *ibid.*, plates, pl. CLXIV.

opposite the row of houses, was the "cult house", approximately 7 m. by 5.20 m., consisting of two trapezoidal communicating rooms (XXXIII and XXXIV), each probably with a door on the northeast side of the house. In the north corner of room XXXIV is an offering stand called "altar 105" by the excavators.

In periods 2 and 3 (Late Cypriote III B and C respectively) the plan of the settlement remained approximately the same with more rooms built against the wall, except that instead of a priest's house there was to the north of it a building with 22 rooms. The cult house, however, was the only building which was actually in continuous use in the three periods, while the other buildings were not rebuilt each time on exactly the same plan.

In period 3, the exterior entrance of room XXXIII was closed leaving only an entrance (at a new point) through room XXXIV; another room also was added on the northwest side of the cult house. Apparently the settlement was abandoned peacefully at the end of period 3, and when it was reinhabited in Cypro-Geometric III it was rebuilt on a completely new plan.

The offering stand (altar 105) was built when the acropolis was first fortified, as is shown from the fact that the floor of the first period abuts against the stand. For the same reason it is certain that the stand continued in use in periods 2 and 3. It "is built of flat limestone slabs framed by upright slabs around the edges. Of these latter slabs only one was found preserved". The stand is founded on rock and is 0.42 m. square. Thirty votive objects from period 1 were found in room XXXIV, including five terracotta bull heads, a bronze pin and needle, conical and cylinder seals, gold and bronze earrings, and glass beads. Two "libation jugs" were the only votive objects found in the cult house from period 2. Apparently the votive objects of period 2 were removed to the newly repaired cult room of period 3. An incense burner, a bronze ring, and a bronze needle from period 3 were found in the cult room.

The rich votive offerings found in this house and the existence of the offering stand indicate clearly that this was a cult house. This conclusion is further strengthened by the fact that on the northeast sides of the acropolis there were 38 rock-cut pits in which votive refuse was dumped.⁹⁰ They contained great quantities of ceramic, metal, and stone objects. In strata of period 2 were found carbonized olive pits (the result of slow oxidation), evidently from vegetable offerings.⁹¹

⁹⁰ *Ibid.*, pp. 492, 506 f., 592-626.

⁹¹ *Ibid.*, pp. 550 (No. 670 b), 601, 626 (reference on p. 593 to find No. 1532 is wrong); plan XVII location X 17; cf. pp. 493 f.

The cult house with its offering stand remained in use over a period of two centuries. The retention of the cult house and stand in exactly their former aspect after two destructions is adequate testimony to the especial sanctity with which they were invested. The presence of the objects in the cult room shows that rich votive offerings were brought to the stand, which was obviously the central and most important object in the room. Perhaps the votive objects were thought to be deposited in the *kolpos* of the divinity, as in period 3 at Agia Irini (§ 28.)⁹² In that case food offerings would be appropriate, but not the performance of sacrifices with fire on the altar. This was confirmed by the lack of traces of fire in the refuse pits. If this reasoning is correct, "altar 105" is not an altar but an offering stand.


28. Agia Irini Sanctuary. The sanctuary of Agia Irini on the northern side of Cyprus, overlooking Morphou Bay, was occupied for seven periods. In the first period of occupation, Late Cypriote III, there were four buildings, in one of which were two low tables of unhewn slabs and a hearth; after a brief intermission, the site was reoccupied for five successive periods from Cypro-Geometric I to the latter part of Cypro-Archaic III; a seventh period of occupation took place in the first century B.C.

In period 1 the sanctuary was an isolated group of houses.⁹³ The precinct contained four houses arranged about the north, east, and west sides of the precinct. The northern building had three rooms on the ground floor and a second story. The central building, which stood on the east side of the precinct, had two rooms (V and VI) and a long porch on the side facing the court. Of the two buildings to the south, only partly excavated, one was probably a storehouse of cult apparatus and votive objects, and the other a priest's building.

The majority of the finds from the precinct were discovered in the central building, which is identified as the cult house from the evidence afforded by the finds. The cult house (*ca.* 8.50 m. by 5.50 m.) is oriented

⁹² At Agia Irini the arrangement of the votive statues about the altar is more formal, but the underlying purpose of the votive offerings was probably the same.

⁹³ *S.C.E.*, II, text, pp. 651, 665, 671, 817, 820 f., plans XXIII, XXVII (section XVI, as indicated on plan XXIII); plan fig. 263. Periods 2-7 are treated below, § 37.

northwest-southeast. It has an entrance on the southwest side and is divided into two unequal rooms by a  wall abutting against the southwest wall. Access to the smaller room VI was through the larger one, room V.

In room V a stone slab (inv. no. 2785) ⁹⁴ 0.90 m. by 0.60 m., with a dark glossy surface was found against the dividing wall on a layer of small river pebbles, thus giving the effect of a low table. This was the offering table of the shrine. Opposite the offering table, in the south corner of the room, there is a hearth consisting of no structural element, located in a shallow cavity filled with "ash and carbonized matter".⁹⁵ Behind the hearth there is a low rubble bench built up against the wall at the south corner. In this same room another slab was found resting directly on the floor. Its shape was less regular, and its surface was not polished (inv. no. 2786).⁹⁶ Other objects found in this room include a stone axe-head, two basalt pestles, and two stone spindle whorls.

In room VI two more slabs were found against the northeast wall, but they were smaller than the others (inv. no. 2787).⁹⁷ Among the finds in this room was a terracotta minotaur.

The polished slab was evidently the most important object in the shrine, though in the same room there was a hearth and another slab in a less important position. The offerings deposited on the table were simple vegetable and food offerings. There is no evidence at Agia Irini in this period for burnt sacrifices of animals. Even the custom of giving votive objects to the divinity was still unknown at this poor shrine: the single minotaur found can hardly be considered a votive object, exactly because only one such object was found. Rather, it was a ritual implement. Probably the unpolished slab served also as a supplementary offering table on which the overflow from the polished slab was placed. As to the hearth, in view of its simplicity (and, perhaps, the lack of burnt bones in its ashes⁹⁸), the most natural explanation of its use is that it served the utilitarian purposes of cooking and heating, although it may also have served for ceremonial fires. The wall bench in this room is the earliest example in a Cyprian shrine. The two smaller slabs in room VI may be offering tables or

⁹⁴ Cf. Register of Finds, *ibid.*, p. 774.

⁹⁵ *Ibid.*, p. 669.

⁹⁶ Cf. Register of Finds, *ibid.*, p. 774.

⁹⁷ Cf. *ibid.*

⁹⁸ Unless the expression "carbonized matter", *ibid.*, p. 669, refers also to bones.

ordinary utility stands or a sort of pastry table on which was prepared the food which was deposited on the polished slab.

29. Summary of Cyprian Offertory Apparatus. Two pre-Hellenic Cyprian cemeteries and five sanctuaries have been discussed above, ranging in date from Neolithic (before 3000) to the end of Late Cypriote (1000). With the exception of the earliest site, Khirokitia cemetery, the sites examined were homogeneous enough to be assigned to a single religion. Though various outside influences were felt in Cyprus,⁹⁹ Cyprian religion shows remarkable continuity, striking testimony of which is seen in the presence of offering tables at the earliest and latest pre-Hellenic sites. Evidence for burnt flesh sacrifices, except at the Neolithic cemetery of Khirokitia, is lacking. Fruits and other simple food were probably the only offerings known in the second and third millennia, and structures similar to monolithoid altars were probably used as offering tables or for ceremonial fires. On the other hand, the possibility must not be absolutely rejected that burnt flesh sacrifices also were practiced, since at each of the sanctuaries examined, a structure appears which could have served as an altar, whether monolithic, monolithoid, or a hearth altar. The strong Near Eastern influence in Cyprus also supports this possibility.¹⁰⁰ In

⁹⁹ Syrian influence is strong throughout the history of Cyprus, while Egyptian and Palestinian influences are seen in Middle Cypriote, and Creto-Mycenaean influence appears in Late Cypriote II and III. For a discussion of the Creto-Mycenaean influence see Wace and Blegen in *Klio*, Neue Folge, XIV, 1939, pp. 131-147; also Casson, *Ancient Cyprus*, Chapter II. For a discussion of the archaeological material of the third and second millennia, especially in regard to the political relationship of Cyprus with its neighbors, and the possibility that a Mycenaean colony existed in Cyprus, see Hill, *History of Cyprus*, I, pp. 26-36, 67 note 1, where further references are given.

With the exception of one E.M. III vase found at Lapithos (Casson, *Ancient Cyprus*, p. 207) there is no indication of Early Minoan contacts with Cyprus, and M.M. contacts with Cyprus are very slight. But after 1400 there is evidence of close contact with the Aegean, and a Mycenaean ("Achaean") colonization of Cyprus seems to have taken place about that time (Casson, *op. cit.* Chapter II, esp. pp. 39-43; Schaeffer, *Missions en Chypre*, pp. 106, 112-115).

¹⁰⁰ For material related to Oriental altars, the adequate interpretation of which lies beyond the competence of the author, the reader is referred to the following selected bibliography: Kurt Galling, *Biblisches Reallexikon* (1937), articles "Altar" and "Tempel"; *idem*, *Der Altar in den Kulturen des*

any case, the elevated masoned ritual structures of the second millennium evolved into the monolithoid and monolithic altars of the first millennium in Cyprus.

The two sites which date from Late Cypriote III begin to show signs of Aegean contacts, in the terracotta bullheads and the minotaur. These, however, must be considered merely as trade importations, not as indications of religious influence. For neither were Minoan sacred vessels of any kind found even as trade importations, nor does the hearth at Agia Irini resemble Minoan-Mycenaean shrines. On the contrary, the bottomless libation vessels of Vouni antedate and are probably the models of their Minoan counterparts.

alten Orients (1925); in Hugo Gressmann, *Altorientalische Bilder zum alten Testament*² (1927), see references in index 6 under "Altar" and "Tempel"; for two altars in the same temple and bones from sacrifices (middle and second half of the second millennium) at Beth-Shan, see Rowe, *The Four Canaanite Temples of Beth-Shan*, I (1940), pp. ix, 8-10, 16 f., pls. VI, VIII; see also May and Engberg, *Material Remains of the Megiddo Cult* (1935), pp. 12 f., 18 f. (references to Syrian and Palestinian censers); *Lachish*, II, Tufnell, Inge, and Harding, *The Fosse Temple* (1940), pp. 25, 93 f. (burnt bones, especially right shoulder of sheep, goat, ox, etc., from burnt sacrifices), 38-44 and pls. LXVI-LXXIII ("shrines" with offering table set on the floor against the wall in each of structures 1, 2, and 3; chronology, p. 24). See also Albright, *Archaeology and the Religion of Israel* (1942), Chapters II and III. Valuable examples are also listed in H. H. Von der Osten, *Ancient Oriental Seals in the Collection of Mr. Edward T. Newell* (University of Chicago Oriental Institute Publications, XXII), pp. 116-119, fig. 11 and plates. See also H. Vincent, *Canaan d'après l'exploration récente*, Chapter II, and Index, s.v. *autel*; P. Volz, *Die biblischen Altertümer*, §§ 5, 6, 30-42; I. Benzinger, *Hebräische Archäologie*,³ §§ 59-61, 71-76; Stanley Cook, *The Religion of Ancient Palestine in the Light of Archaeology*, pp. 10-29, 78-82.

CHAPTER II

GEOMETRIC AND ARCHAIC PERIOD: (a) ALTAR TYPES OF AUTOCHTHONOUS ORIGIN

A. GENERAL DESCRIPTIVE

30. General Characteristics of Altars. The term altar ¹ is here defined as applying to any object or structure, temporary or permanent, made for the purpose of receiving the fire in which flesh offerings for the gods were burned. The functional characteristics of altars are, therefore, as follows:

(a) They must provide space for a fire sufficiently large to burn the flesh offerings, which in the case of sacrifices to Olympian deities are part of the entrails, fatty tissues such as the peritoneum, or a correspondingly sizeable piece of flesh, with or without bones, and in the case of sacrifices to chthonic divinities are entire animals.^{1a} The altar is also

¹ The Greek word, βωμός, is probably derived from βάλω, and was rarely used also in the sense of platform or base: see P.-W., III, cols. 681 f., (*s.v.* βωμός); I, cols. 1663 f. (*s.v.* Altar); Henrici Stephani *Thes. Graec. Ling.*⁸ (Paris, 1833), II, col. 472 (*s.v.* βωμός); de Molin, *De Ara apud Graecos*, pp. 1-5.

The Canaanite etymon *bamah*, which by the end of the second millennium had the meaning of height, and, by extension, place of worship or of sacrifice (with altar), has been proposed; cf. Gesenius, *Hndworbch. u. d. alte Testament* ¹⁸ (1915), p. 102 (*s.v.*). This etymology was accepted by W. F. Albright, *Archaeology and the Religion of Israel*, p. 202 (where references) but Professor Albright now wishes to retract this view. The Semitic etymology cannot be correct, for it would indicate a much stronger Oriental influence on the form of Greek altars than the material evidence permits. By the eighth century, the period of the strongest Oriental influence, a native Greek word must have already become established, and could not have been supplanted easily. In the Septuagint βωμός was regularly used for Hebrew *bamah*; cf. Hatch and Redpath, *A Concordance to the Septuagint*, I, p. 232; *Etymologicon Magnum*, *s.v.* βωμός.

Early altars may occasionally have been so closely identified with the divinity as to be considered the throne of the divinity (Reichel, *Ueber vorbellen. Götterkulte*, p. 40), but that concept obviously was not the fundamental concept in the geometric period, nor did that concept determine the forms of Greek altars; cf. Fiechter, *Jb. Arch. I.*, XXXIII, 1918, pp. 176-187.

^{1a} On the act of sacrifice and the distribution of the victims' flesh, see

used for food offerings and for libations of wine and olive oil: this is the chief use of altars in homes.

(b) Altars before temples must be large and beautiful enough to form an appropriate center for solemn and impressive ceremonies attended by large numbers of worshippers. The altars found in profane public places and in homes are, of course, usually smaller, but they, too, must maintain the dignity of the divinity, and must satisfy the esthetic sense.

(c) Altars to chthonic divinities frequently exhibit peculiarities demanded by the special rules governing chthonic sacrifices and the shedding of the victim's blood: they may be very low structures, have a depression in the center, be level with the ground, or be depressions in the ground or natural fissures in the rock.

The form of Greek altars is determined by these functional considerations. Since these simple requisites can be fulfilled in many ways, there is considerable variation in the form of altars. This variation resolves itself into about 25 distinct and homogeneous types, established on the basis of structural form. On the other hand, with rare exceptions (notably colossal altars), the structure was not elaborated beyond the functional demands, nor was the ornamentation developed disproportionately.

The 25 types may be reduced roughly to eight classes, if account is taken only of the general appearance and form. The classes are: (1) hearth and ground altars; (2) ceremonial, hollow ceremonial, and rubble cubical; (3) monolithic and monolithoid (rectangular and cylindrical), stepped pyramidal, and hexagonal; (4) stepped monumental; (5) colossal; (6) well altars and sacrificial pits; (7) arulae; (8) primitive altars (partly overlapping).

An altar may be monolithic, masoned, or rock-cut; of stone, terracotta, or metal; or it may be an ashen or earthen mound, a log heap, or a depression in the ground.

The size of altars varies roughly in proportion to the number of

F. Puttkammer, *Quo Modo Graeci Victimarum Carnes Distribuerint*, Dissertation Königsberg 1912; L. Robert, *Le sanctuaire de Sinuri*, I, *Les inscriptions grecques*, pp. 48-50, with further references; F. Robert, *Thymélè*, pp. 159-180, 338-364, *et passim*, with further references; Von Prott and Ziehen, *Leges Graecorum Sacrae*, e.g., part 2, pp. 78-81, No. 24; Stengel, *Die griechischen Kultusaltertümer*² (Müller Handb.), pp. 95-153.

celebrants: in homes, country shrines, and secular public buildings small altars (mostly monolithic) were usual, while before temples, ceremonial or monumental altars were generally present.

31. Autochthonous and Non-Autochthonous Types. Greek altar types fall into three classes, according to the source of derivation (see §§ 21, 29, 43):

Autochthonous Types

(a) Well altars (found only in the Aegean sphere and Magna Graecia) derive structurally from Mycenaean walled pits. [Hearth altars, although structurally unrelated to autochthonous hearths, are also treated in this chapter.] (Chapter II, Part B.)

(b) Cyprian monolithic and monolithoid altars (the only types found in Cyprus during the geometric and archaic period) evolved directly from pre-Hellenic indigenous structures similar to altars, which had been used as offering tables or stands for ceremonial fires. (Chapter II, Part C.)

Non-Autochthonous Types

(c) All other types of altars (including probably the monolithic and monolithoid altars outside of Cyprus) are importations, original creations of the Hellenes, or are derived from undetermined antecedents; in any case their antecedents are not Minoan-Helladic or Cypriote. (Chapter III.)

32. Location and Orientation of Altars. The normal location of altars connected with temples was before the eastern entrance, in view of the cult statue. But when a temple was rebuilt with a different orientation, usually a new altar was not built according to the new orientation of the temple, but, if at all, over the old altar, possibly even with the old orientation. Thus, altars are frequently found not situated and oriented exactly properly in regard to the temple to which they pertain, that is, they are not on the longitudinal axis of the temple and do not exactly face the temple. When these two structures are found to be not properly oriented in regard to each other, this may indicate either that the altar in question antedates the temple, or that an earlier altar at the location of the present altar antedates the temple. Proper orientation usually indicates that both structures were built at the same time.

The numerous instances of superposition of successive altars (§§ 37; 46, Nos. 1, 7; 47, Nos. 1, 5; 48, Nos. 8, 10; 50, No. 3; 79, Nos. 2, 3; cf. 82) testify to the sanctity with which the site of the altar was invested,² and demonstrate the studied adherence to tradition which is generally desired in religious forms.

For practical reasons altars were usually placed in the open air, but this was not necessary: several Cyprian altars occur inside shrines, all hearth altars were inside temples, and even the household hearth could serve as an altar (cf. also § 81, No. 2; P.-W., I, col. 1651).

Altars are frequent in streets and market places, before statues of the gods or alone.^{2a} On chthonic altars west of temples see pp. 94, 216; on altars in houses see § 66; on hearth altars see § 34; on grave altars see Index, *s.v.* Grave altar.

B. MINOAN-MYCENAEAN SURVIVALS

33. Transitional Temple Plans. The temples with hearth altars are, as a group, among the earliest Hellenic temples, and constitute the transition from Mycenaean to Hellenic plans.³ Among them in particular are two temples, at Dreros and Prinias (§ 34, Nos. 2, 4), both of which have interior columns, a hearth in the middle of the naos, and a wall bench in the corner of the naos.⁴ That these elements can be traced back to Mycenaean prototypes, is clear from the fact that exactly these features are encountered in the Late Helladic Building L at Korakou,⁵ in a building below the acropolis at Tiryns dating from the

² Cf. P.-W., I, cols. 1641 f. (*s.v.* Altar). See also H. Nissen "Ueber Tempel-Orientierung", *Rhein. Mus.*, XL, 1885, pp. 38 ff., 329 ff., 480 ff.; XLI, 1886, pp. 481 ff.; XLII, 1887, pp. 28 ff.

^{2a} Cf. P.-W., I, cols. 910-913; 1653; *Ephesus*, II, p. 150, No. 29, line 21 (20 altars in the agora); Paus. VI, 24, 3.

³ Hearth altars in temples are discussed by Marinatos, *B.C.H.*, LX, 1936, pp. 239 f., and M. Guarducci, "La eschara del tempio greco arcaico", *Studi e materiali*, XII, 1936, pp. 181-185. On the form and evolution of the megaron cf. E. B. Smith, "The Megaron and its Roof", *A.J.A.*, XLVI, 1942, pp. 99-118; Blegen, "The Roof of the Mycenaean Megaron", *A.J.A.*, XLIX, 1945, pp. 35-44. In general see Weickert, *Typen der archaischen Architektur in Griechenland und Kleinasien*, esp. Chapters I A, II A, IV A.

⁴ Pernier, *A.J.A.*, XXXVIII, 1934, pp. 171-177.

⁵ Blegen, *Korakou*, pp. 80 f., fig. 112.

end of Mycenaean times,⁶ and, except for the absence of the hearth, in the Late Mycenaean shrine at Asine (§ 12, No. 6).⁷

The temples at Dreros and Prinias show clearly an attempt to adapt the Minoan-Mycenaean ceremonial hearth and tripod hearth to use in the burnt flesh sacrifices introduced by the new religion.⁸ Later the hearth altar lost favor because only a limited number of worshippers could attend the ceremony of sacrifice inside the temple, and because the smoke from the hearth altar blackened the cult statue and the interior of the temple. An effort was made to combat the smoke and the danger of fire to the roof, as is indicated by the use of central interior columns in most temples which had hearth altars.⁹ These temples also show how the wall bench of Minoan-Mycenaean shrines was used in an offering stand in these Hellenic temples, to be replaced later by the offering table. Thus, in the Aegean sphere altars and offering tables have two distinct lines of derivation, altars being derived from non-autochthonous antecedents, and offering tables being derived from autochthonous Minoan-Mycenaean antecedents. In Cyprus, on the other hand, both have a common source of origin, as is seen later in this chapter (§ 42).

The worship of sacred trees was another element of Minoan-Mycenaean religion retained by Hellenic religion. The following altars mentioned in this volume are connected with tree worship: ¹⁰

⁶ Discovered by Karo, *Arch. Anz.*, XLII, 1927, cols. 368-370, fig. 4.

⁷ On Helladic domestic architecture cf. *Swedish Messenia Expedition*, pp. 408 f.

⁸ Payne, *Perachora*, p. 112, says: "The presence of an altar or a sacrificial pit within a temple is of course a primitive feature, a direct survival of the age when temple and house were still undifferentiated." This is strictly true only for the Minoan-Mycenaean hearth, and is applicable to Hellenic hearth altars only in a general sense, since in Crete the differentiation between shrine and house existed as early as Middle Minoan I (*P.M.*, I, pp. 151-163) and on the mainland the differentiation existed (though probably not so generally) by Mycenaean times (§ 18).

⁹ References to discussion of the architectural problems, especially in connection with the roof of the Mycenaean Megaron, will be found in Note 3; cf. also Pernier, *Annuario*, I, 1914, pp. 76-81; Bagenal in Payne, *Perachora*, pp. 42-51, figs. 7-10, cf. p. 113.

¹⁰ On the Minoan-Mycenaean worship of trees, see M. Nilsson, *The Minoan-Mycenaean Religion and its Survival in Greek Religion*, Chapter VIII, "The Tree Cult", pp. 225-246; Evans, "Mycenaean Tree and Pillar Cult",

1-9. Samos, Heraion. Tenth century B.C. to the fourth or fifth century A.D. See § 46.

10. Ephesus, Artemision. Eighth or seventh century. See § 46.

11. Agia Irini, Cyprus. Period 4, seventh century. See § 37.

12. Idalion, Cyprus, Western Acropolis. Period 5, seventh century. See § 39.

34. Hearth Altars. The term hearth altar is here applied only to hearths constructed expressly to serve as altars; the term is not applied to household hearths, which could, of course, be used as altars at any time.¹¹ Eleven certain examples are listed below from the tenth or possibly ninth century to the end of the pre-Classical period. All these examples are in temples, but only one possible later example occurs in a temple (§ 81). The only true hearth altar of post-archaic date extant is a Hellenistic example, which occurs in the prytaneion at Lato in Crete (§ 81, No. 2). For a monolithic well altar in the Tholos at Delphi, evidently taking the place of a hearth, see § 77, No. 2. For sacrificial pyres, see § 83. Hearth altars differ from ground altars in that they are not definitely chthonic, that they are located in the interior, and that they are usually delimited by upright slabs or ashlar blocks. Although the location of the hearth altar is evidently a reflection of Minoan (§ 6) and Helladic (§§ 13, 33) practices, the structural form is not of autochthonous origin.

Hearth altars have been considered as especially connected with the burning at pyres of entire animals, often alive, to Artemis,¹² but this is against all probability, since it is exactly the larger pyres for the burning of entire animals which necessarily must take place outdoors. In one case, of Roman date, a stone barrier in the open actually served

J.H.S., XXI, 1909, pp. 99-204; cf. Ohnefalsch-Richter, *Kypros, The Bible and Homer*, Chapter 2, "Tree Worship and the Transition to Anthropomorphic Image Worship", pp. 29-221.

¹¹ Cf. P.-W., I, cols. 1647 f. (*s.v.* Altar); *Odyssey*, XIV, 420. On the ancient nomenclature, cf. F. Robert, *Comptes rendus* (Acad. inscr. belles-lettres), 1936, pp. 110-113; Gow, *J.H.S.*, XXXII, 1912, pp. 213-238.

¹² Nilsson, *J.H.S.*, XLIII, 1923, pp. 146 f.; Romaïos, *Arch. Delt.*, X, 1926, pp. 27-31.

to mark off the location of a pyre to Herakles¹³ on Mt. Oite, but this parallel has little force when applied to the interior of geometric or archaic temples. The excavator of the temple at Taxiarchis (No. 9) considers the profusion of burnt bones from *small* animals as strong indication that the animals were burnt entire, but this argument is not unanswerable. On the other hand, it neither contradicts the supposition that hearth altars were used both as chthonic and Olympian altars: their Minoan-Mycenaean derivation and their form support the former possibility, and their interior position (which is unsuitable for the relatively larger fires of chthonic sacrifices) supports the latter possibility.

In the following list at least four temples have interior columns (Nos. 2, 4, 7, 11). In at least five cases the longitudinal axis of a rectangular hearth altar was parallel to that of the temple (Nos. 2-5, 8, and possibly 9), while in one case the longitudinal axis of the hearth is perpendicular to that of the temple (No. 7). Two hearth altars were circular and left no structural remains (Nos. 9, 10). One temple with hearth altar is dated in the tenth or possibly ninth century (No. 1), two are dated in the eighth century (Nos. 2, 3, but hearth of No. 3 dates in the seventh century), three date in the seventh century (Nos. 4, 5, 7), and four date in the sixth century (Nos. 8-11, 16). Two early hearths (Nos. 2, 3) are smaller than any later ones. Average dimensions are 2.16 m. by 1.20 m. in plan.

Pre-Hellenic associations are indicated by Minoan-Mycenaean settlements at or near the sites of Nos. 1-6, 8, 11, 16. Apollo is the inhabitant of three temples (Nos. 2, 10, 16), and may be the successor to a pre-Hellenic deity.

1. Olous. Under the level of the archaic temple of Aphrodite at Olous in Crete, a "protogeometric" (tenth or possibly ninth century¹⁴) building existed, consisting of a room 11 m. by 4.75 m., with an entrance on the long side. A rectangular hearth altar, bounded by ashlar blocks and paved with slabs, was found, which evidently was before the entrance and under a shed supported by a wooden column (of which the stone base was preserved). If this temple is dated correctly, it is surprising to find the position of the

¹³ Papadakis, *Arch. Delt.*, V, 1919, *Parart.*, pp. 25-33.

¹⁴ Pendlebury, *The Archaeology of Crete*, p. 313, places the end of the protogeometric period about 900 B.C.; cf. Demargne, *La Crète dédalique*, p. 96.

hearth altar already moved before the temple, although later temples retained it in the interior of the temple where the Minoan tripod hearth had been.—*B.C.H.*, LXI, 1937, *Chronique des fouilles*, pp. 474 f., fig. 40; *B.C.H.*, LXII, 1938, *Chronique des fouilles*, p. 482.

2. Dreros, Temple of Apollo. The temple of Apollo at Dreros, in Crete, dated in the middle of the eighth century by the excavator,¹⁵ contains four elements of great interest: in the southwest corner of the naos is a rectangular masoned wall bench or podium; next to it built against the south wall is the *keraton*; in front of the keraton is a table of offerings; and in the center of the naos is a hearth. Fig. 22.

The temple is oriented approximately north-south with the entrance to the north, and measures 10.90 m. by 7.20 m. The wall bench is 1.34 m. east-west by 0.76 m. in plan and 0.95 m. high. On it were found potsherds, fragments of terracotta statuettes, bone fragments, including bull teeth and goat horns, coals, blackened earth, and a broken slab (stone tray), underneath which were more bones and one-handled cups. The interior of the wall bench was explored but yielded nothing.

The keraton is east of the wall bench, against the rear wall. It consisted of three slabs set upright lengthwise to form a rectangle adjacent to the podium 1.37 m. east-west by 0.71 m. north-south. In the fill above the keraton the peasants found three bronze statuettes,¹⁶ which originally must have rested on a wooden covering of the keraton. The interior of the altar consisted of earth mixed with some stones and a multitude of small goat horns, along with bone and vase fragments, two iron knives, and a bronze plaque with a nail in it. Since similar objects were found under the blocks which constitute the walls of the keraton, it is clear that the blocks are a later addition after the accumulation had already grown to some proportions. The excavator suggests that the wooden cover of the keraton had a hole in it, through which the objects were dropped.

In front of the keraton was a rough-dressed ashlar block 0.55 m. high, 0.20 m. wide, and 0.30 m. thick, set upright in the ground. About it were found eight fragments of a tray-like rough dressed stone, irregularly round, with a raised edge, which was 0.90 m. wide and 0.12 m. thick. Only two

¹⁵ Marinatos, *B.C.H.*, LX, 1936, pp. 219-256 (identification, pp. 253-255; dating pp. 255 f.), pls. XXVI, XXVII, XXXI; cf. pp. 257-285.

¹⁶ The bronze statuettes are described and illustrated by Marinatos, *Arch. Anz.*, LI, 1936, cols. 217-222, figs. 2, 3.

small pieces were lacking. Evidently this tray was a table of offering which rested on the upright block.

The hearth was 1.47 m. by 0.94 m. with its longitudinal axis parallel to that of the temple. It consists of a row of crudely shaped ashlars 0.24-0.25 m. high and 0.14-0.30 m. thick, within which was found a layer of ashes over a layer of red clay. North of the hearth there was a low cylindrical stone column base.



FIG. 22. Dreros. Eighth-century temple of Apollo.
(§ 34, No. 2)

In this altar one observes that the Minoan tripod hearth, which was often placed in the center of the floor, has been expanded to fulfill a new purpose, namely the burning of more or less sizeable pieces of animal flesh. The wall bench and the offering tables show even more clearly their derivation from Minoan prototypes. It is natural that ideas and customs from an ancient, half-forgotten religion would be held in sacred awe, and would be cherished for long centuries. Thus, the hearth,

wall bench, and offering table are retained here, to preserve traditions of splendid shrines already vanished. The association of Apollo with a keraton may also be seen at Delos,¹⁷ and, for example, in a reference by Callimachus, *Hymnus in Apollinem*, 62 f.

Another example of the survival of Minoan worship in Crete may be cited. In a seventh or eighth-century stratum at Dreros was found also a Minoan square vessel with a round depression in the top, of bluish gray steatite.¹⁸ It is 0.125 m. square and 0.07 m. high. Its purpose is unknown, but perhaps it had a sacred use.

3. Perachora, Temple of Hera Limenia. In the center of the eighth-century temple of Hera Limenia at Perachora on the Bay of Corinth there is a rectangular hearth altar *ca.* 1.40 m. by 1.00 m. formed by four blocks which enclose a bed of ashes.¹⁹ The longitudinal axis of the altar is parallel to that of the temple. Three of the blocks are re-used limestone, and one of them has an inscription of *ca.* 650, which supplies a *terminus post quem* for the date of the altar. Since early Proto-Corinthian potsherds found in the ashes are of the middle of the seventh century (*ca.* 675-640 B.C.), the hearth must have been used at least as early as the middle of the seventh century. It is, however, reasonable to assume that some type of simple hearth had existed since the building of the temple in the previous century. The three blocks of limestone are badly eaten away by the effect of the fire. The fourth slab is of schist, evidently replacing a fourth block of limestone which was corroded by the fire. Besides the pottery found in the ashes, there was also a rich deposit of ivories, scarabs, etc. Fig. 60.

4. Prinias, Temple A. In the naos of the seventh-century temple A at Prinias in Crete, there is a hearth paved and bounded by stone blocks, and in the corner of the naos there is a wall bench.²⁰ The site was occupied from sub-Minoan times. Fig. 23.

¹⁷ See § 68.

¹⁸ *B.C.H.*, LXI, 1937, p. 17, fig. 10.

¹⁹ Payne, *Perachora*, pp. 111 f., 257 f., pls. 7 c, 140 (plan).

²⁰ Pernier, *Annuario*, I, 1914, pp. 18-111, "Templi arcaici sulla patela di Prinias" (architectural analysis of the temples, pp. 19-45 and 75-92). The sculptures are dated *ca.* 625-600 by Richter, *The Sculpture and Sculptors of the Greeks*, p. 35. It is probable that the temple itself is earlier than the sculptures.

The temple was rectangular, 12.00 m. by 5.925-6.35 m., oriented roughly east-west with the entrance to the east. Two column bases were found on the longitudinal axis of the temple, one on either side of the hearth. The hearth is in the center of the naos.²¹ Its largest dimensions are 1.40 m. by 2.40 m., with the longitudinal axis parallel to that of the temple. The floor of the hearth is paved with undressed slabs, and it is bounded by a row of limestone ashlar blocks (0.10-0.12 m. thick, 0.22-0.30 m. high) of varying length with a rounded top, set in headers. On the hearth were found ashes and burnt bones. The bench (*ca.* 2.80 m. long and 0.50 m. to 0.70 m. wide), apparently of rubble, is built in the southeast corner of the temple against the south wall.

5. Prinias, Temple B. Temple B at Prinias is situated immediately to the south of temple A, and is dated somewhat later in the seventh century. The plan is very irregular, consisting of pronaos, naos, and adyton (total length *ca.* 18 m., width *ca.* 4.45-5.00 m.). The entrance is on the east side. In the center of the naos is a hearth measuring 2.75 m. by 1-0.90 m., with its longitudinal axis parallel to that of the temple.²² The barrier about the hearth is similar to that of temple A, though it encloses no paving. Behind the hearth, touching the barrier, there is a round base *ca.* 0.15 m. high, 0.34 m. in diameter, over which is a truncated cone 0.22 m. high with 17 vertical flutings. This does not seem to be a column base, in spite of its resemblance to the column bases in temple A. Fig. 23.

The round base does not appear to be an altar, as suggested by the excavator, Pernier, for it would duplicate in that respect the function of the hearth. Further, as an altar it would be unique in form and in location. It is, therefore, best considered a sacred omphalos, or some sort of a fetish.²³

[6.] Vroulia. In connection with this group of temples may be mentioned also a small temple in the vicinity of Vroulia, Rhodes, the

²¹ Pernier, *loc. cit.*, pp. 30-35; figs. 7 (plan of temples A and B), 9-11, 17 (cross section).

²² *Ibid.*, p. 42; figs. 15 p. 41, 17 p. 44 (cross section).

²³ An omphalos in a sixth-century vase painting is designated an altar, but that is exceptional: Middleton, *J.H.S.*, IX, 1888, pp. 301 f., fig. 11 (from Gerhard, *Auserl. Vasenb.*, ccxxiii). This lends some support to the difficult conjecture that the "altar" of Poseidon in the temple of Apollo at Delphi (Paus., X, xxiv, 4) was actually the sacred omphalos: Frazer, *Pausanias's Description of Greece*, V, p. 317, where reference to Verrall, Euripides' *Ion*, pp. xlv f. On omphaloi in general, see Middleton, *loc. cit.*, pp. 295-303; Thompson, *Hesperia*, VI, 1937, pp. 110-112.

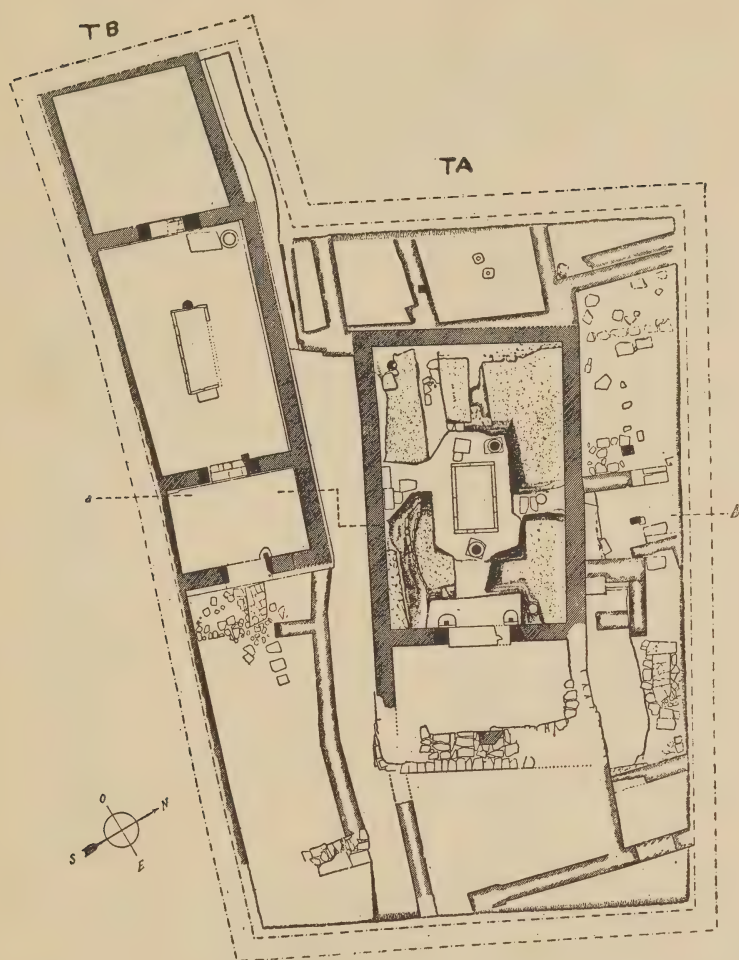


FIG. 23. Prinias. Temples A and B.
(§ 34, Nos. 4, 5)

plan of which shows clear Minoan affinities.²⁴ It dates from the eighth century or earlier and contained finds dating from Late Minoan to the seventh century. In it were a wall bench, a rectangular altar, and a refuse or sacrificial pit. Fig. 24.

The shrine was 8.38 m. by 4.66 m. wide in the front and 4.70 m. in the rear, and was oriented approximately east-west. It consists merely of three walls with no door in the front. Along the rear wall of the shrine a bench was built of rubble, *ca.* 0.45 m. high. A row of slabs across the floor *ca.* 2.50 m. from the rear of the shrine delimited the level portion of the floor in the rear from the sloping portion in front. Astride this row of slabs and slightly to the north of the middle, there was a rectangular altar, 0.55-0.60 m. square in plan and 0.65 m. high. It consisted of slabs laid in four courses, the first and third courses consisting of two slabs each, the second and fourth of one slab. In front of the altar and to the north was a round pit 0.90-1.00 m. in diameter and 0.53 m. deep, which had been dug up by the peasants. In it were many pieces of coal, probably from bone rather than wood, and the peasants said nothing else had been found in it by them. The finds in the shrine date from late Minoan to seventh century B.C.

It is possible that the pit was used for sacrifices to a chthonic divinity, that is, a hero, as the excavator believes, but in that case the altar also would be sacred to the same hero (see § 85). It is also possible that it was merely a refuse pit in which the ashes from the sacrifice were buried. This shrine represents a further step in the transition from the Minoan to the Hellenic temple, in that the altar was removed from the naos. A xoanon or the cult statue probably stood on the bench. Later the cult statue was placed on a separate base against the wall, and the bench was transformed into an offering table before the divinity.

7. Neandria, Asia Minor. The seventh-century temple at Neandria has, toward the rear and near the side wall, a rectangular paved area 2.60 m. by 1.13 m., bordered by upright slabs extending about 0.20 m. above the floor level. The longitudinal axis is perpendicular to that of the temple. This construction is probably a hearth altar, though other interpretations are not impossible. The cella had a row of columns along its longitudinal axis.—

²⁴ Kinch, *Vroulia*, cols. 8-12, pl. I (plan); Nilsson, *The Minoan-Mycenaean Religion*, pp. 390 f., fig. 109 (plan). The strength of Minoan and Mycenaean penetration in Rhodes can be judged by Minoan and Mycenaean finds in Ialysos, reported by Maiuri, "Ialysos", *Annuario*, VI/VII, 1923/1924, pp. 83-341



FIG. 24. Vroulia. Rustic shrine.
(§ 34, No. 6)

Koldewey, *Neandria* (LI. Winckelmanns Programm), pp. 23-28, figs. 52-55; Pernier, *Annuario*, I, 1914, pp. 78-80.

8. Dreros. Another temple at Dreros, evidently of the sixth century, was 24 m. by 10.70 m., and consisted of naos and pronaos; it was oriented northwest by southeast, with the entrance southeast. In the center of the naos was a paved area about 2.50 m. by 1.50, with the longitudinal axis parallel to that of the temple. Against the rear of this area was a small rectangular U-shaped "construction". About this complex were "traces of fire and coal remains". It is clear that the paved area was the floor of a hearth altar, while the other structure was either an offering table or the base of the xoanon. Two round stone column bases were found in the sekos.—Xanthoudides, *Arch. Delt.*, IV, 1918, *Parart.*, pp. 25 f., 28 (dating).

9. Taxiarchis, Aetolia. Of two small sixth-century buildings excavated at Taxiarchis, near Thermon, the largest is a temple 11.25 m. by 7.50 m., with the entrance to the east. Over an area of 30 to 40 square [?] meters to the east of the temple there was a profusion of light and dark ash containing abundant burnt bones from small animals. Rock-cut pits full of ashes were also found. Of the hearth altar no structural remains were found, and probably none existed.²⁵ Its location, however, is well shown by a rather clearly delimited stratum of ashes about 2 m. by 1.50 m. in area and 0.20-0.25 m. thick, which contained some coals and a profusion of small white bones and potsherds. The absence of sherds which are clearly earlier than the fourth century indicates that earlier accumulations had been cleaned out.—Romaïos, *Arch. Delt.*, X, 1926, pp. 1-33, esp. pp. 4 f., 25-33, fig. 3 (plan).

As indicated in the beginning of this section, the hearth altar can not be considered as indicating necessarily sacrifices of animals burnt entire. This is especially improbable here, although supported by the excavator, Romaïos, because of the small size of the temple; further, the presence of only small bones does not indicate that only small animals were sacrificed, and it does not indicate that these were burnt entire. Exception must also be taken with the excavator's conclusion that the ash before the temple is the result of pyres for sacrifices of entire (larger?) animals: it appears more reasonable to believe that the ashes outside the temple come from the hearth altar, as do the ashes in the pits. This is rendered more probable by the fact that all the potsherds found in the ashes of the hearth altar are probably fourth century or later: earlier accumulations had evidently been swept before the entrance.

²⁵ For burnt earth and charcoal inside the temple of Hera Argeia in Campana see *J.H.S.*, LVI, 1936, pp. 228 f.

10. Cyrene, Temple of Apollo. The earliest temple of Apollo at Cyrene, dating about 600, had in the middle of the cella a round pit about 0.80 m. in diameter, which contained ashes and other evidence of fire. The fourth-century temple also may have had a hearth, if the fourth-century temple had been built when the "undying fire" of Apollo at Cyrene was mentioned by Callimachus, *Hymnus in Apollinem*, 83.²⁶—Pernier, *Il tempio e l'altare di Apollo a Cirene (Africa Italiana, V)*, pp. 12, 22, pl. VIII; cf. pp. 134, 141.

11. Thasos, Herakleion. A small temple of the sixth century has in the naos a hearth altar bordered by upright stones, with ash remains and burnt earth at either end of the hearth altar; on the longitudinal axis of the temple is a square stone pillar base.—*B.C.H.*, LIX, 1935, Chron. d. fouilles, p. 293. (To the north of this temple was found a rock-cut altar [or a base of one?], and rock-cut pits with ashes, evidently of Classical date; *ibid.*, p. 292.)

[12, 13.] Thermos and Olympia. In this connection mention may be made of extensive strata of ashes with bones and coals, which were found associated with apsidal megara at Thermos in Aetolia (tenth to seventh centuries) and at Olympia (tenth to eighth centuries). Although definite hearths were not found (despite the tentative identification of burnt clay flooring as such at Thermos), it appears that large ceremonial and sacrificial fires were burnt inside and at the entrance of these houses. At Thermos the number of bones found in the ash strata, and the extent of the strata, are both too great to come from sacrifices alone, but instead indicate that they come from official feasts as well. This may be indicated also by the fact that the larger bones do not show any effects of fire, while the smaller bones do.—(a) Romaïos, *Arch. Delt.*, I, 1915, pp. 225-284, esp. pp. 227, 244-252, 274-276, figs. 2, 10, 12 (plan and stratification); cf. *idem*, *Arch. Delt.*, X, 1926, pp. 26 f. (b) Helen E. Searls and Dinsmoor, *A.J.A.*, XLIX, 1945, pp. 64 f. (where further references); Dörpfeld, *Alt-Olympia*, I, pp. 81-94, II, *Suppl.*, pls. 3, 17; Gardiner, *Olympia*, pp. 26 f.; Romaïos, *Arch. Delt.*, I, 1915, pp. 273-275.

[14.] Sparta, Temple of Orthia. In the southwest corner of the oldest temple of Orthia (ninth or eighth century), some upright slabs enclosed a mass of earth. This may have been a kind of hearth altar²⁷ or, more probably, a wall bench (see § 47, Nos. 1-3).

²⁶ On the date of the Hymn, see Mair and Mair, *Callimachus, Lycophron, Aratus* (Loeb Classical Library), pp. 23 f., where further references; cf. Cahen, *Callimaque*, pp. 245-385.

²⁷ The suggestion is advanced by Pernier, *Annuario*, I, 1914, p. 79.

[15.] Selinus, Temple C. The remains described below (§ 36, No. 3), and attributed to an offering table, are considered to belong to a hearth altar: Marinatos, *B.C.H.*, LX, 1936, p. 240; Pernier, *Il tempio e l'altare di Apollo a Cirene (Africa Italiana, V)*, p. 23 n.

16. Delphi, Temple of Apollo. The existence of a hearth in the temple of Apollo is known from literary testimony. This Minoan-Mycenaean element obviously has a local tradition, since Delphi was occupied since the Neolithic era, and finds indicate that the site of the Hellenic temple was also the site of Minoan-Mycenaean worship.—For the pre-Hellenic remains, Montelius, *Le Grèce préclassique*, pp. 174-180, figs. 618-652, where references; also Perdrizet, *Fouilles de Delphes*, V, pp. 1-21, figs. 1-97; for the architectural remains and reconstruction, Courby, *Fouilles de Delphes*, II, text, Chapters I and II, esp. p. 79, fig. 67 (plan) p. 69; for the literary testimony and a restoration, Middleton, *J.H.S.*, IX, 1888, pp. 282-322, esp. p. 303, fig. 12 (plan) p. 311; Frazer, *Pausanias's Description of Greece*, V, pp. 350-352.

35. Masoned Well Altars. This type comprises masoned cylindrical altars of one or more courses, with a cylindrical or irregular cavity in the middle extending to the ground; the masonry is mostly or entirely above the ground. The structure at Tiryns is of Late Mycenaean date, and probably survived into Hellenic times. The other definite examples are from Akragas, and appear to date about the sixth century (the same as the earliest hollow ceremonial altars).

The similarity in form between the Mycenaean walled pits and the Hellenic well altars suggests that well altars derive from Mycenaean walled pits, and this hypothesis is strengthened by the probable survival and retention of the Tirynthian example (No. 1). It is difficult, therefore, to accept the alternative hypothesis, namely, that the Hellenic well altars have no connection with Mycenaean examples, and are mere derivatives of rectangular hollow ceremonial altars, which, in turn, are a derivative of ordinary ceremonial altars. Rather, chronological considerations and similarities in form render it probable that well altars existed earlier, and that rectangular hollow ceremonial altars derived their form by combining elements from well altars and ordinary ceremonial altars. Hellenic well altars, therefore, must have been built much earlier than the known sixth-century examples, that is, in the tenth or ninth century. Since the ritual functions which this type fulfills can also be fulfilled by a simple depression in the ground, one is inclined

to believe that no well altars were built in the turbulent tenth century, when so little building activity took place, and that until the ninth century either surviving Mycenaean walled pits or simple depressions in the ground were used. Average dimensions are 3.40 m. diameter and 0.74 m. height.

1. Tiryns. See § 15, No. 2.

2-5. Akragas, Sanctuary of Demeter and Kore.²⁸ The Sanctuary of Demeter and Kore (also called the Chthonic Sanctuary) comprises six temples, two unroofed precincts, and sixteen altars, all dating after 582 (when Akragas was founded by the Rhodian colony Gela) and before the Classical period. In the middle of the fifth century or later, temple L with a stepped monumental altar was built. The structures are as follows, from north to south (the altars other than well altars are treated elsewhere in the appropriate sections):

(1) Precinct 1, with altars 1 (well altar) and 2 (rectangular monolithic) in the western and eastern wings, respectively, and altar 5 (sacrificial pit) outside the precinct at its southeast corner. Figs. 26, 63.

(2) Precinct 2, containing in the western part altars 3 (well altar) and 4 (rectangular monolithic) and a sacrificial pit (not numbered); to the east of the precinct, before the entrance, altar 6 (ceremonial); and outside the precinct, against the center of the south longitudinal wall, altar 7 (hollow ceremonial). Figs. 27, 62.

(3) Temples 2 and 3, adjacent to each other.

(4) A group of three altars, lying between precinct 2 and temple 1: altar 8 (large well altar), 9 (ceremonial), 10 (small well altar).

(5) Temple 1.

(6) Two partially superimposed temples, east of which altar 15 (stepped monumental).

²⁸ In general, see Marconi, *Agrigento arcaica*, esp. plan p. 19 and pp. 18-38; cf. *idem*, *Agrigento, Topografia ed arte*, esp. pp. 29-48; R. Et. Gr., XLVII, 1934, pp. 65-67 (summarized from *Atti e Memorie della Società Magna Grecia*, 1931, pp. 7-109). Fig. 25.

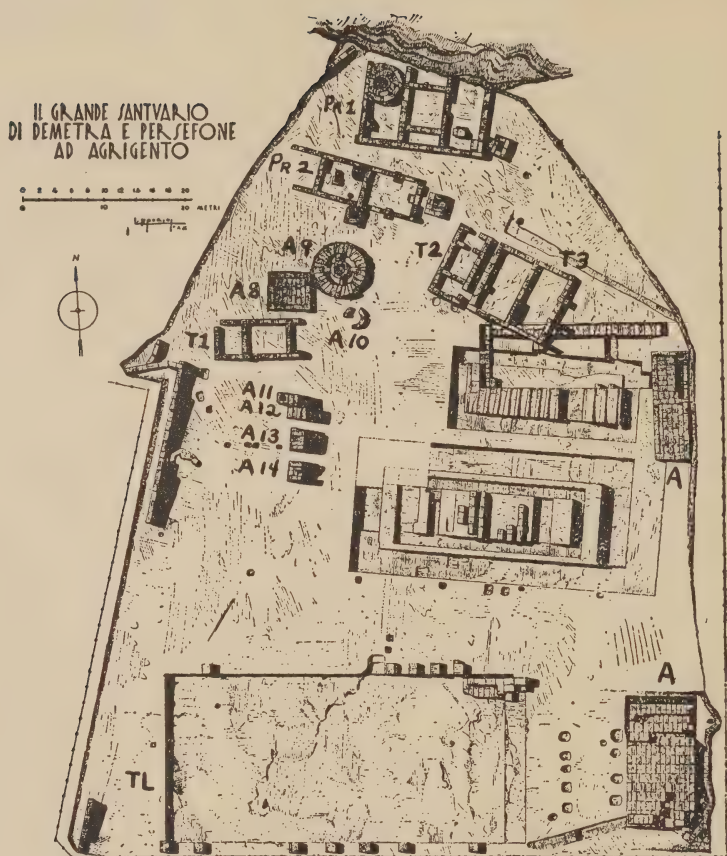


FIG. 25. Agrigento, Sanctuary of Demeter and Kore (A8 and A9 are transposed).
(§ 35, Nos. 2-5)

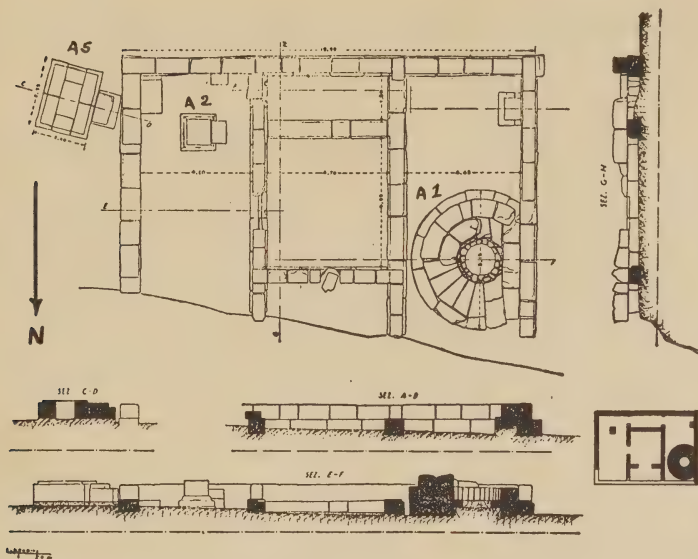


FIG. 26. Akragas, Sanctuary of Demeter and Kore. Precinct 1, with well altar 1, rectangular monolithic altar 2, and sacrificial pit 5.

(§ 35, No. 2; § 52, No. 8; § 51, No. 2)

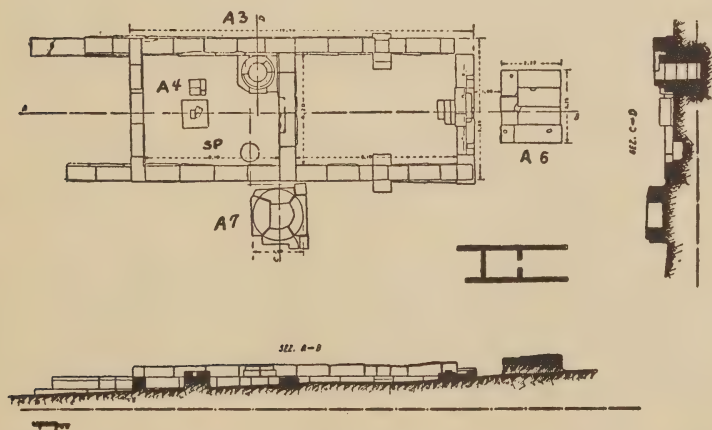


FIG. 27. Akragas, Sanctuary of Demeter and Kore. Precinct 2, with well altar 3, rectangular monolithic altar 4, sacrificial pit, ceremonial altar 6, hollow ceremonial altar 7. Cf. fig. 62.

(§ 35, No. 2; § 52, No. 9; § 51, No. 4; § 46, No. 15; § 50, No. 2)

(7) A group of four altars, between temple 1 and the so-called temple of the Dioscouroi: altars 11 (hollow rectangular), 12, 13, 14 (all ceremonial).

(8) The so-called temple of the Dioscouroi.

(9) Temple L, with a stepped monumental altar (not numbered) to the east.

It is clear that the two types of altars indicate that both chthonic and Olympian deities were worshipped there, and, further, that since both precincts had both types of altars, the deities of these temples, probably Demeter and Kore respectively, were worshipped both as chthonic and as Olympian.²⁹ The position of the two altars in precinct 1, east and west of the central section, is paralleled in the precinct of Zeus Meilichios at Selinus (§ 52, Nos. 6, 7).

Altar 1 is preserved to a maximum height of three courses (*ca.* 1.30 m.), successively recessed, forming an incomplete circle, because the altar is built against a wall of precinct 1. The blocks are wedge-shaped or curved ashlar. The maximum diameter is 5.15 m., the interior diameter *ca.* 1.40 m.—Marconi, *Agrigento arcaica*, pp. 22 f., fig. 6 (plan) p. 21, pl. II a. Fig. 63.

Altar 3 consists of two receding courses of curved ashlar, over a square base, with an opening down the middle to the rock. The base is built in the northeast corner of a room of precinct 2, and is *ca.* 1.50 m. square. It encloses an opening *ca.* 0.70 m. square which extends *ca.* 1.20 m. below the floor level to the rock, where evidently there was a natural fissure. The base extends *ca.* 0.50 m. above the floor level, and on this platform are placed the two circular courses (*ca.* 0.40 m. high) forming a round opening *ca.* 0.65 m. in diameter. In the southeast corner of the same room was a rock-cut pit, filled with vases, statuettes, etc.—Marconi, *Agrigento arcaica*, pp. 27 f., fig. 7 (plan) p. 25, pl. III a.

Altar 8 is preserved only to a height of two receding ashlar courses (exterior diameter 7.85 m., height 0.45 m.), with smaller courses in the center enclosing a circular opening 2.20 m. in diameter.—Marconi, *Agrigento arcaica*, p. 35 (where reference to *idem*, *Studi agrigentini*, pp. 33 f.), fig. 11 (plan) p. 34; *idem*, *Agrigento, Topografia ed arte*, p. 47, figs. 22, 24 (plan). Fig. 61.

²⁹ Servius *ad Aeneid.* III, 93, states that some divinities are a blend of chthonic and heavenly: *nam potestates aliae coelestes sunt, aliae terrenae, aliae permixtae.*

Of altar 10 only four blocks are extant, showing that the original exterior diameter was 2.75 m., and the interior diameter 1.75 m.—Marconi, *Agrigento arcaica*, p. 35, cf. plan p. 19.

6, 7. Akragas, Temple of Demeter and Kore. The late sixth-century temple of Demeter and Kore (under the church of St. Biagio) at Akragas has two circular well altars. They are opposite the north wall, *ca.* 1.50 m. from the krepis, and *ca.* 1 m. apart. Altar I, to the east, consists of seven rather narrow blocks, has a diameter of 2.35 m., and is 0.60-0.75 m. high. This altar also has a cylindrical cavity *ca.* 1.70 m. in diameter. Altar II, to the west of altar I, is built of seven irregular wedge-shaped blocks and one ashlar, all rounded on the outer face. The diameter of altar II is 2.70 m., and its preserved height is 0.25-0.35 m. The opening is very irregular with a diameter of 1.25 m. to 0.75 m. This fact, and the fact that only an outer band 0.30 m. wide around the upper surface was dressed, shows that another course originally rested above the present one, and had a diameter of 0.60 m. less. It is noteworthy that here each goddess has a separate altar, as was the case with the temple of Zeus Meilichios at Selinus (§ 52, Nos. 5, 6).—Marconi, *Not. Scav.*, ser. 6, II, 1926, pp. 136-138; *idem*, *Agrigento, Topographia ed arte*, pp. 69 f., figs. 40, 41.

8. Selinus, Sanctuary of Demeter. Before the propylaea of the sanctuary is extant the lowest course (seven blocks) of a cylindrical structure, probably a well altar.—Koldewey and Puchstein, *Griechische Tempel*, I, p. 84; II, pl. XI, G.

36. Offering Tables. Offering tables were placed in the interior of the temple before the cult statue. Libations were performed over them, and votive objects were placed on them, as well as food offerings. (Several vase paintings show some sort of stand attached to altars or placed before them, but these are not offering tables.³⁰) The evolution of offering tables from Minoan-Mycenaean wall benches is seen in § 33. Few offering tables have been preserved, because they were usually of metal or of wood. A few examples are listed here, to supplement the general studies cited.

³⁰ For offering tables see in general Kruse, P.-W., XV 1, cols. 946-948, *s.v. Mensa*; cf. Stengel, *Die griechischen Kultusaltertümer*,² pp. 23, 90. The auxiliary stands are discussed by Cook, *Zeus*, III 1, pp. 579 f., note 5.

1. Eleusis, Sanctuary of Demeter. A stone slab forming the base of a table of offerings was found between the propylaea and the Telesterion. Parts of the slab are broken off, and two small pieces have subsequently been found. The slab is 0.482 m. wide, 0.234 m. thick, and its restored length is 1.509 m. The top is dressed, but not the under face, nor a narrow band around the bottom of the sides, where the slab was evidently covered by earth. The front side carries an inscription in letters of the early fifth century of five lines relating to the victims which could be sacrificed. There was a rectangular depression in the center of the top 0.165 m. square and 0.02 m. deep. The sides of the depression taper inward in order to receive a metal or wooden support, probably of a small statue. On either side are two round depressions 0.305 m. in diameter and 0.08 m. deep. While the depressions are worked smooth, most of the top face of the slab is not, which fact, combined with the position of the slab on the ground, shows that the round depressions were not destined to receive libations, but the legs of an offering table.—Von Prott, *Ath. Mitt.*, XXIV, 1899, pp. 240-266.

2. Athens, Lenaion. The temenos of Dionysus west of the Acropolis in Athens, called the Lenaion or the *Dionysion en Limnais*, was in existence from very early Hellenic times to early Roman times, when it was covered by a deep layer of filling. The small temple in the triangular temenos dates from the time of Peisistratos, and is itself built over two older ones. In the middle of the precinct are the remains of a base 3.10 m. square. Five irregularly shaped rectangular poros slabs *in situ* permit the restoration of the complete rectangle. On the slabs are three round depressions 0.24 m. in diameter and 0.10 m. deep. These depressions, and a fourth on a lost slab, received the legs of a table of offerings, which, if it extended 0.20 m. past the legs, was *ca.* 2 m. square. The base shows two periods of use, for originally the holes were smaller, and were later made wider, at which time the bottom of the holes was filled in with small pebbles. The legs of the table were of metal, for if the support had been of stone, there would have been two upright slabs, one at each end, instead of the four legs.—Dörpfeld, *Ath. Mitt.*, XX, 1895, pp. 161-176, pl. IV, where further references are given to offering tables, especially to O. Rubensohn, *Die Mysterienheiligtümer in Eleusis und Samothrake*, p. 196; Frickenhaus, *Ath. Mitt.*, XXXVI, 1911, pp. 113-144, believes that the base carried a miniature heroön with four columns. Dörpfeld's reply is in *Ath. Mitt.*, XLVI, 1921, pp. 81-104.

3. Selinus, Temple C. On the pavement of the naos of the early sixth-century temple C at Selinus, seven meters from the door, was a rectangle

6.10 m. by 4.90 m. which was surrounded by a raised border and had four holes, one near each corner. This may represent the position of the table of offerings, though its great size is surprising. (For the probable location of a later table of offerings, see § 88, No. 12.) Hulot and Fougères, *Sélinonte*, pp. 217-219.

4. Selinus, Sanctuary of Demeter Malophoros, Precinct of Hekate. Two superimposed slabs: the upper one carried two perpendicular supports (narrow stone slabs or wood) of what was evidently a small table of offerings. Maximum dimensions in plan 0.85 m. by 0.68 m.—Gàbrici, *Mon. Ant.*, XXXII, 1927, cols. 118 f., fig. 74.

5-7. See § 59, Nos. 19-21.

Models in Miniature

8-27. Selinus, Sanctuary of Demeter Malophoros. Fragments of about 20 miniature tables of offerings, of terracotta, were found in the sanctuary.—Gàbrici, *Mon. Ant.*, XXXII, 1927, cols. 181-200, esp. fig. 101, pls. XXXI-XXXVI.

C. CYPRIAN ALTARS

37. Agia Irini Sanctuary. After period 1 of occupation in Late Cypriote III (§ 28), the sanctuary of Agia Irini was soon reoccupied continuously from the beginning of Cypro-Geometric I to almost the end of Cypro-Archaic II (periods 2 to 6), that is, from about 1000 to 510 or 500.³¹ It is, therefore, fortunate that this site provides evidence which helps to clarify the transition of Cyprian sacred offerings from bloodless to both bloodless and burnt flesh sacrifices. In period 1 there were at least two offering tables at the sanctuary, while in periods 2 and 3 the

³¹ *S.E.C.*, II, text, pp. 642-824; esp. pp. 651 (the altars), 671-674 (topography by periods), 702 (No. 938, cult fetish), 774 (Nos. 2785-2788, offering tables), 797-810 (condition of finds, especially the terracotta statues), 810-824 (chronology); see plan fig. 263 and plan XXIII (both general); plan XXVII section XVII (altar 50); plan XXVI section XII square M (altar 49); figs. 261, 270 (altar 50); 272 (tree enclosure); 275 (libation table of period 2); 276-281 (terracotta statues about altar 50, with altar 49 appearing also). It is convenient to divide the first centuries of the first millennium B.C. into the following periods: Cypro-Geometric I, II, III (1000 to 700 B.C.), Cypro-Archaic I and II (700 to 475 B.C.), Cypro-Classical I and II (to ca. 325 B.C.).

sanctuary had an offering table for bloodless offerings and also an altar for burnt flesh sacrifices. Thereafter the altar remained the most important ritual instrument, except for the cult statue. No traces of later offering tables remain, probably because they were of metal or wood. Fig. 28.

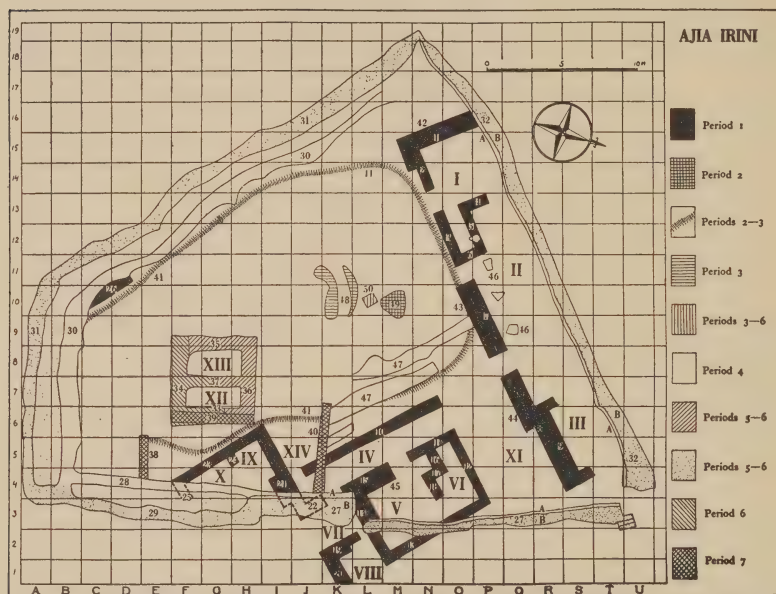


FIG. 28. Agia Irini Sanctuary.

(§ 37)

In period 2 (Cypro-Geometric I to middle of III) the sanctuary consisted of an enclosure roughly oval, 11.50 m. by 7.90 m. The sanctuary had approximately in the center an altar roughly triangular in plan (altar 49) (1.60 m. wide, 0.30 m. high) founded partly on rock and partly in the stratum below. It was covered by the filling of the succeeding period. This is the earliest example of a Cyprian altar used for burnt flesh sacrifices, so identified by analogy from period 3. Near the altar an offering table (inv. no. 2788) was found similar to the ones of period 1, but with several small depressions in the top (cf. § 7, Nos. 1-8). Figs. 64, 65.

In period 3, which dates from the middle of Cypro-Geometric III to the middle of Cypro-Archaic I, the temenos covered the same area as in the

preceding period. The floor level was raised and altar 50 was erected, which remained in use during the three following periods as well.³² Altar 50 is a single block of limestone 0.70 m. square and 1.10 m. high. The part which was visible was square and well dressed, while the lower part is unworked and badly eroded, so that it is narrower below. The top of the altar is hollowed out into a rather deep cavity. The altar is founded on a leveling substructure of rubble which rests on the rock. Fig. 66.

In this period pits were dug at the foot of the altar containing votive objects, ash, and animal bones. Over a hundred statuettes in various degrees of completeness were found in the vicinity of the altar, some *in situ* on the level of the ground about the altar, and others in deposits near the altar. Among the objects found were also three scarabs, one bronze male figure, six animal terracotta statuettes, five terracotta minotaurs (human head and upper part of body), six small human terracotta idols, and three stone objects. In front of the altar are two curved courses of rubble of unknown purpose. Perhaps the fire was started here, and hot embers from it placed on the altar.

In period 4 (Cypro-Archaic I to beginning of II) the same altar was used. It was given a revetment of lime mortar about its base. The temenos was widened to 40 m. by 30 m., and the floor level was raised by alluvial deposits from floods of the stream which passes by the temenos. Particularly remarkable is a rectangular enclosure 5.80 m. by 5.60 m. southeast of the altar within the temenos. It consists of two rectangular rooms, whose walls are preserved to their original height, 1.10 m. The stratum inside the enclosure is organic, which can be best explained as the remains of decayed trees. From illustrations on Minoan seals it is evident that this must be an enclosure of the sacred trees.³³

The rich finds from this period include 141 scarabs and over 1700 terracotta statues of human figures. Most of the statuettes were found grouped about the altar almost in their original position. They were arranged in concentric semi-circles around the altar, the smallest statuettes nearest the altar, the larger statuettes and small statues behind these, and the lifesize statues farther back. The successive alluvial layers of periods 5-6 were not removed, and the sculptures of these periods were placed on the successively raised levels.³⁴

³² Cf. Sjöqvist, *A.R.W.*, XXX, 1933, fig. 8 p. 339.

³³ This enclosure is discussed by Sjöqvist, "Die Kultgeschichte eines Cyprischen Temenos" in *A.R.W.*, XXX, 1933, pp. 308-359. Cf. Ohnefalsch-Richter, *Kypros, The Bible and Homer*, Chapter 2, "Tree Worship and the Transition to Anthropomorphic Image Worship", pp. 29-221.

³⁴ *S.C.E.*, II, text, pp. 808 f.

In period 5,³⁵ from the beginning to the middle of Cypro-Archaic II, there were only slight changes. Among the finds of this period are: over 100 terracotta statuettes of human beings and animals (1 minotaur) found near the altar, 129 scarabs, four iron objects, and four bronze objects, one silver-lead ring, 8 faience ornaments, etc.

In period 6, which occupied the latter part of Cypro-Archaic II, but not the end of it, another flood raised the floor. The top of the altar was now level with the ground, and a raised barrier of lime mortar to retain the coals and ashes was constructed, resting partly on the earth and partly on the upper edge of the altar. In the depression so created were found two strata of ashes, coals, and burnt bones. The plan of the temenos remained substantially the same.³⁶ Among the finds of this period are 36 scarabs, 131 terracotta statuettes in the group around the altar, four bronze objects, eight glass ornaments. The most important object is the "cult object" or fetish, which was an oval stone of basalt found where it had evidently rolled off the altar. It is a "river stone of almost globular shape with traces of having been rubbed with ointment and burnt by fire".³⁷ It is broken; the diameter is 0.19 m. It may be presumed that the fetish was preserved from a much earlier period. There was a brief seventh period in the first century B.C., when a small hypaethral shrine was erected.³⁸

The concept of the character of the divinity at Agia Irini passed through the following stages: in period 1 the divinity was a spirit, not localized or clearly defined, and not definitely anthropomorphic. Votive objects, therefore, were not desired by the divinity, but mere prudence dictated that, before a rustic banquet began, a token food offering be made, lest the divinity's envy be aroused. In period 2 the first altar was constructed, which, in contrast to the offering table which also was used, was a purely religious object with no profane associations, and, besides, was more impressive than an offering table. Above all, the fire on the altar made it the visual focus of the ceremonies. Accordingly, it was inevitable that the divinity become identified with the altar.³⁹ This

³⁵ *Ibid.*, pp. 673 (topography of period 5), 812 f. (finds), 818 (chronology).

³⁶ *Ibid.*, pp. 674 (topography of period 6), 809 (finds), 818 f. (chronology).

³⁷ *Illustrated S.C.E.*, II, plates, plate CCXLIII, 5. Inv. No. 938 (see Register of Finds, p. 702).

³⁸ *Ibid.*, text, p. 674, 702, No. 938.

³⁹ Cook, *Zeus*, I, pp. 518-521, believes that the primitive altar in Greece was so regarded; cf. Reichel, *Ueber vorhellenische Götterkulte*, p. 40. See

actually took place in period 3, when votive objects began to be placed around the altar. The progressively greater importance of the altar is indicated by its more careful construction in later periods. Finally, the anthropomorphic concept evolved, a cult statue was set up, and the altar lost its identification with the deity. But perhaps before this final stage the stone fetish was in some way connected with the divinity, and was placed upon the altar in period 3 or 4.⁴⁰ The form of the altar was not an innovation, but was a direct copy of the offering podia or stands for ceremonial fires of the preceding millennium.

38. Agios Iacovos, Iron Age Sanctuary. The Iron Age Sanctuary at Ayios Iacovos on the top of a hill about 100 m. from the Bronze Age Sanctuary (§ 26), was in continuous use for three periods, probably Geometric I to III (1000-700).⁴¹ From period 2 or 3 a monolithic altar is extant. It is possible that this altar was used merely as an offering table, and consequently, its position here would be normal. It is more probable that it is a true altar, and that its position at this shrine, as at Agia Irini, represents a transition from offering tables to altars, that is, from unburnt to burnt flesh sacrifices.

The sanctuary was a rectangular structure oriented north-south (6.96 m. by 10.75 m.), and was probably, but not certainly, roofed. The north (front) wall is not preserved, but it may have been a temple in antis. The floor is made by extending over the ground the lime cement which covers the walls. The walls are preserved to a maximum height of 0.80 m. The latest building dates Cypro-Geometric III. Below are remains of two earlier structures both of exactly the same construction as those above, dating Cypro-Geometric I and II. Perhaps there was also another floor above these which was destroyed in ploughing. A transverse wall projecting halfway across the building from the long side divides the temple into two rooms of unequal size. In the rear room on the east wall, diagonally opposite the entrance to the room, is a square monolithic altar against the wall. Seventy-five objects were found in the area including terracotta statuettes, a bronze needle and buttons, glass

Ohnefalsch-Richter, *Kypros, The Bible and Homer*, I, pp 222-227 for a discussion of the imageless rites of Yahwe on Mt. Sinai, Anat-Athena on Idalion, and Zeus on Arcadian Olympus.

⁴⁰ Nilsson, *Greek Popular Religion*, p. 79, distinguishes between altars and sacred stones including omphaloi.

⁴¹ *S.C.E.*, I, text, pp. 361-370; plan XIV; figs. 138-141.

fragments, an ivory button, and scarabs. "The finds give full evidence, that the excavations have revealed a cult place. The type of sanctuary is, evidently, the house-chapel."

39. Idalion, Western Acropolis Sanctuary. After being deserted for two centuries (see § 27 for the earlier periods), the Western Acropolis of Idalion was reoccupied for three periods (4-6) from Cypro-Geometric III to 470 by a small rustic precinct with a culthouse and one altar in period 4, and two altars in periods 5 and 6.⁴² Altar 48 of period 4 shows its derivation from offering tables in its position against the fortification wall, outside the shrine. This altar is one stage further advanced than the interior altar against the wall at Agios Iacovos. Altar 40 of periods 5 and 6 exhibits a further advance, in being placed away from the wall. Altar 38 of periods 5 and 6 shows close relationship to the altar of periods 4 and 6 at Agia Irini: in both cases the wealth of votive objects about the altar shows that the altar itself partook of the nature of the divinity. The sacred enclosure about this altar is similar to the enclosure of the sacred trees at Agia Irini.

In period 4 (Cypro-Geometric III and the early part of Cypro-Archaic I) the Western Acropolis of Idalion was again fortified by a thick wall with turrets, of which remains are extant on the west side.⁴³ There seems to be only one building inside the acropolis, a single room built against the extant wall. Since there is evidence that this room was roofed in the two succeeding periods, it is probable that it was also in period 4. Though the finds (only 2 objects) do not help to determine the purpose of the building in this period, it is clear that it was a cult house. This is indicated by the existence of an altar, by the general aspect of the enclosure, and by the analogy of the two following periods, when this building was certainly a cult house. The divinity worshipped was the Graeco-Semitic goddess Anat-Athena.⁴⁴ Two meters northeast of the cult house altar 48 was built against the acropolis wall.

⁴² S.C.E., II, text, pp. 460-628; see plan VII, and plan fig. 230.

⁴³ S.C.E., II, text, pp. 525-527 (topography of period 4), 624 (chronology); plans V, VII, X sect. IX, IX sect. V, XIX; fig. 230 (plan).

⁴⁴ S.C.E., II, text, p. 628. The evidence includes a dedicatory inscription in the Cypriote syllabary: Perrot and Chipiez, *Histoire de l'art dans l'antiquité*, III, pp. 772, 779, 866-869; and an inscription to Anat in Phoenician. On both inscriptions see Ohnefalsch-Richter, *Kypros, The Bible and Homer*, I, pp. 14-16, 18.

Altar 48 is rectangular, 1.80 m. wide, 1 m. long, and 1.20 m. high. It is a heterogeneous construction of local limestones, poros blocks, and large river stones, the whole roughly coursed with thin layers of mud mortar and splinters of stone.⁴⁵

In period 5 (Cypro-Archaic I and early part of Cypro-Archaic II) the acropolis was substantially the same except for the addition of a covered hall south of the cult house.⁴⁶ The walls of the cult house were rebuilt, and altar 48 was superseded by altar 40, which was built 7 m. northeast of the cult house and 2.50 m. from the fortification wall. In addition, altar 38 was built outside the northeast corner of the cult house. The cult house is so identified from the altar as well as from the finds in it.⁴⁷ Altar 40 is 1.75 m. by 1.15 m. in plan and preserved to a height of 1.00 m.⁴⁸ It is made of poros blocks of the same technique as altar 38. It is founded partly on the rock. Altar 38 is 1.80 m. by 1.60 m. in plan and is preserved to a height of 0.50 m. It is made of poros and limestone blocks with some mud binding.⁴⁹ In the stratum of period 5 about 36 objects were found in an area around the altar so clearly defined as to suggest the existence of a fenced off court about the altar. Some 90 objects were found to the south of this area in the court, and 17 in the cult house.

In period 6 (Cypro-Archaic II to 470, when Idalion was captured by the Kitians) a row of ashlar surrounded this area. The only change inside the acropolis was the rebuilding of the cult house and the erection of a low wall or barrier about altar 40.⁵⁰ Over this base course was some type of low wall or fence enclosing an area rectangular in plan, adjacent to the fortification wall near the chapel.⁵¹ There was an entrance at either end. Forty-five objects were found in this enclosure, but over four times as many about it in the court. Only 15 were found in the cult house.

Another precinct on the eastern acropolis was excavated in 1885.⁵²

⁴⁵ *S.C.E.*, II, text, pp. 492 (description of altar 48), 511 (stratigraphy), fig. 212 p. 483.

⁴⁶ *Ibid.*, pp. 528-530 (topography of period 5), 625 (chronology).

⁴⁷ The position of the finds is indicated *ibid.*, plan XX, by their number as it appears in the Register of Finds, where the objects are described.

⁴⁸ *Ibid.*, pp. 492 (description of altar 40), 514 (chronology).

⁴⁹ *S.C.E.*, II, text, pp. 491 (description of altar 38), 513 (chronology); figs. 194, 204, 205, 230 (plan); plans XIV 2, XX, XI sect. XI, IX sect. IV.

⁵⁰ *Ibid.*, pp. 531 f. (topography of period 6), 625 (chronology).

⁵¹ *Ibid.*, fig. 237 p. 528, fig. 238 p. 529, plan XX.

⁵² Ohnefalsch-Richter, *Die antiken Kultusstätten auf Kypros*, p. 43, pls. III 8, VII A; *idem*, *Kypros, The Bible and Homer*, I, pp. 345, 400 f.; II, pls. VII A, XVI, LVI, LVII (the structure in the center of the court is interpreted by the excavator as the base of a statue or fetish).

The presence of six fire tongs on the altar when originally excavated indicates that the sanctuary was destroyed violently. Finds from this precinct range from approximately sixth to fourth century or later, according to the excavator. The altar was in a large room, and was 0.90 m. high, 1.90 m. by 1.40 m. in plan; it was of rubble construction. The interior was originally left hollow or filled with ashes or dirt. In the middle of the upper surface there was a depression, which was still filled with ashes when the altar was found. It appears that this altar is a carelessly constructed monolithoid altar—unusual because of the depression on the top for the fire—rather than a hollow chthonic altar. Near the altar, two upright slabs 0.60 m. high were embedded in the ground. The excavator suggests that they had a plank across them and were used in the dismembering of the victims, but it is more probable that these slabs supported an offering table. Nearby was also a deposit of ashes and charcoal, in which a small clay cylinder and terracotta fragments were found.

40. Kition, Acropolis Sanctuary. The acropolis of Kition was inhabited from the end of Late Cypriote II down to late Hellenistic times, for ten successive periods.⁵³ During periods 1 to 3 it was occupied by secular buildings. During periods 4 to 6 (Cypro-Archaic I to end of II) the site, without substantial change of plan, was a sacred precinct, consisting simply of a peribolos wall with a shrine, probably hypaethral, built against the wall. The same plan was retained in periods 7 and 8 (approximately Cypro-Classic I and II, described here), after which time the site reverted to secular use. Altar 36 of period 6 has the position later taken by the offering table, that is, at the feet of the cult statue.

Direct evidence for sacred use in period 4 (middle of Cypro-Archaic I to beginning of II) is lacking, but this may be assumed. From period 5 (beginning to middle of Cypro-Archaic II) a marble plinth base with part of the feet of a statue more than life-size is preserved. This was probably the cult image. In period 6 (middle of Cypro-Archaic II to end) the sanctuary

⁵³ *S.C.E.*, III, text, pp. 1-75; see esp. pp. 7 f. (the altars), 18-21 (topography of periods 4-6); plan fig. 16 (topography of periods 4-6). Only altar 36 of period 6 pertains to this chapter. The remaining altars date in the Classical period, and are included in the discussion of the last chapter.

was provided with a sand and gravel floor, and altar 36 was built in front of the cult statue.

In period 7 (approximately Cypro-Classic I) a massive peribolos wall was built. The shrine was a rectangular room 7.50 m. by 5.50 m. Altar 37 was built inside the shrine against the east wall. On the altar and near it were remains of ash and carbonized matter. Altar 38 was built outside the shrine, to the east. In period 8 (approximately Cypro-Classic II) the same plan was probably retained, with altars 39 and 40 to replace the older ones.

When the temenos was demolished, the votive offerings of sculptures were buried in two large pits, which contain the accumulated objects of periods 5 to 8 inclusive. The register lists 460 objects (nos. 10-470) from the pits, mostly stone statues of human beings, and some statues of Herakles-Melkart, the *polioukhos* of Kition.

Altar 36 is 0.80 m. by 0.75 m. in plan and 0.80 m. high. It is rectangular and constructed of rubble and chips of stone with mud mortar. The top and south side are damaged.

Altar 37 is 0.65 m. by 0.60 m. in plan and 0.40 m. high. It is a rectangular stone block with a slightly concave top.

Altar 38 is 0.62 m. by 0.60 m. in plan and 1.00 m. high. It is in the form of a rectangular monolithic limestone pillar, and it has 2 oval moldings around the shaft, one 0.25 m. above the base and the other 0.38 m. below the top. It stands on a rectangular limestone slab. The position of the moldings on this altar is unique.

Altar 39 is built of limestone ashlars without binding material. It is a step-shaped structure of four levels, the lowest one of two courses. The top measured 0.80 m. by 0.70 m. The lowest level, the foundation, is 1.50 m. by 1.35 m. The total height is 1.15 m.

Altar 40 is 1.15 m. square and 0.60 m. high. It is a rectangular limestone block with a molded base, and it rests on a substructure of limestone slabs with no binding material.

41. Hearths. Two structures outside of peribolos walls have been identified as altars by the excavator, but their location renders this improbable. Perhaps cooking for humans was excluded from the precincts, and these structures are merely hearths for cooking. One is a square structure at the sixth-century precinct of Resef-Apollo at Frangissa near Idalion,⁵⁴ and the other is a U-shaped structure at the archaic precinct

⁵⁴ Ohniefalsch-Richter, *Kypros, The Bible and Homer*, I, pp. 343-345; II, pls. III 6, VI; *idem*, *Die antiken Kultusstätten auf Kypros*, p. 42, pls. III 6, VI (the "altar" is marked A).

of Artemis-Cybele near Achna.⁵⁵ In this connection mention may be made of another construction in the far corner of the cella of a small temple at Vouni which is identified as an altar by the same excavator, but which is probably merely a wall bench serving as a table of offerings or as a stand for ritual objects.⁵⁶

42. Summary of Early Cyprian Altars. Until Classical times the only types of altars known in Cyprus were small monolithic or monolithoid altars. These altars belong to a single, coherent evolutionary sequence, as is seen from their rough adherence to a common structural form. This form derives directly from the Bronze Age offering podia or stands for ceremonial fires examined in Chapter I, Part D. It is remarkable that the variety of altar types found in other Greek regions during this period is lacking in Cyprus.

The eight altars examined above, and especially the series at Agia Irini, show the transition of the center of the ritual from bloodless offerings on offering tables, to burnt flesh sacrifices on altars. This is reflected in the position of the altars: the two oldest ones (Agia Irini and Agios Iacovos), dating in the tenth century, and two others (Kition and Idalion), dating in the seventh and sixth centuries, are situated inside a building, as were the Bronze Age offering tables at Agia Irini and Idalion; and a tenth-century altar (Agios Iacovos) and an eighth-century altar (Idalion) are placed against the wall, as were the Bronze Age offering tables.

⁵⁵ *Idem, Kypros, The Bible and Homer*, I, pp. 16 f.; II, pl. IV; *idem, Die antiken Kultusstätten auf Kypros*, p. 42, pl. IV (the "altar" is marked A).

⁵⁶ *Idem, Kypros, The Bible and Homer*, I, p. 344; II, pl. V; *idem, Die antiken Kultusstätten auf Kypros*, pp. 41 f.; pl. V.

CHAPTER III

GEOMETRIC AND ARCHAIC PERIOD: (b) ALTAR-TYPES OF NON-AUTOCHTHONOUS ORIGIN

43. Derivation of Non-Autochthonous Types. In contrast to the orderly, coherent evolution of altars in Cyprus, in the Aegean sphere altars appeared suddenly in the tenth century, creating an abrupt break with local antecedents. A large, relatively developed ceremonial altar appeared in the tenth century, a hearth altar appeared probably in the same century, the low monumental altar appeared in the ninth century, and the well altar probably in the same century. Of these types, the low monumental and hearth altar are not derived from Minoan-Helladic antecedents; the ceremonial altar may or may not be related to the smaller Minoan shrines, for a simple cubical form can evolve independently; and only the well altar is certainly an adaptation of a Mycenaean type. A variety of other types became known from the eighth century onward, but none are derived from local Minoan-Helladic antecedents. [It is in this sense that the spontaneous Hellenic innovations, such as the sacrificial pits (§ 51), are included in the non-autochthonous series.]

The sudden change which took place in the tenth and ninth centuries does not consist merely in the introduction of new structural forms and the modification of old forms. Even more important are the radical innovations in religious practice and probably in religious belief, which are implied by the structural innovations. Since these two new elements—the physical structure of the altar and the religious concept of burnt flesh sacrifice—are chronologically concomitant and functionally interdependent, their origin must be identical. The foregoing chapters have shown that the two elements, so associated, are found neither in the Aegean sphere (§ 21) nor in Cyprus (§§ 29, 42) before the first millennium. The problem needs to be examined further.

The nearest to a Minoan-Mycenaean parallel is the wall bench (§ 33), but that cannot have been the origin of the Hellenic altar, because of the differences in location, function, and form. Further, there is no indication that the Minoan-Mycenaean wall bench ever

received a fire, or had evolved into anything more than a stand for cult apparatus. Likewise, neither tripod hearths, nor ceremonial fires, nor walled pits can be in any fundamental sense the precursors of the Hellenic altar, since their function was not sacrificial (§ 21), and since these types and their successors as well were of rather secondary importance in their respective cults (§§ 34-36). It is clear, therefore, that the main structural antecedents of Greek altars are not to be found in Minoan-Mycenaean sacred architecture, any more than the conceptual antecedents of Greek sacrifices are to be found in Minoan-Mycenaean religious practice.

In Cyprus, too, reasonably close structural parallels are lacking. The two rubble podia at Idalion (§ 27) dating Late Cypriote II may be cited, but they differ fundamentally from the early Aegean altars, since they are round and considerably lower and smaller, and were probably not associated with burnt flesh sacrifices.¹ Besides the lack of structural parallels, we must realize that Cyprian influence in the Aegean at the end of the second millennium could not have been strong enough in religious matters to introduce such new concepts as sacrifices; for in Greece proper at this time there was virtually no Cyprian penetration in commercial or political matters. The same consideration precludes our looking toward Oriental parallels as the direct inspiration and origin of Greek altars.²

Minoan-Mycenaean or Cyprian antecedents, therefore, cannot be found for the earliest Hellenic sacrifices and their altars. Nor can it be admitted that Hellenic sacrifices grew out of some minor, to us unknown, element of Mycenaean ritual; for the introduction of sacrifices affected the very foundations of Greek religion, and mere evolution of minor concepts could not have produced such a basic change in the short space of approximately one century which intervened between the disintegration of Mycenaean life and the appearance of the earliest altars.

¹ In Cyprus these podia did evolve into altars; but they evolved into small monolithic or monolithoid altars, a type quite different from the early altars in the Aegean sphere.

² For Late Cypriote wares found on the Greek mainland, see Casson, *Ancient Cyprus*, p. 38. A full examination of early Oriental parallels, and of Oriental influences on the later development of Greek altars is beyond the scope of this study. For pertinent Oriental material, see § 29, note 100.

How then are we to explain the sudden appearance of relatively developed large masoned altars at the very beginning of the first millennium? The obvious and correct answer seems to be that primitive prototypes of these masoned altars had been developed or borrowed by Dorian tribes in one of their stopping places outside of Greece and that these prototypes, along with other new religious concepts, were brought by them into Greece proper during the course of their invasions of the twelfth and eleventh centuries.³ Exactly how this new religious element was spread to the non-Dorian populations we can only guess, but after the utter failure of the Mycenaean gods to protect their followers, it was only natural that the worship of their conquerors should gain ground rapidly. We may also postulate that the non-Dorian populations already had religious concepts, such as unburnt offerings and ceremonial fires, which made the acceptance of sacrifices easy.⁴

In any case, the acceptance of the altar evidently was universal even as early as the tenth century, for the two earliest altars are altar I

³ How long the Dorians were separated from their kin (the Mycenaean Achaeans), whether the Dorians spent the two middle quarters of the second millennium in northern Greece, and under what influence they lived during that period, are still matters of dispute. In general, see Burn, *Minoans, Philistines, and Greeks*, *passim*, esp. pp. 225 f.; Hall, *The Civilization of Greece in the Bronze Age*, pp. 239-269, 287-291; Nilsson, *The Minoan-Mycenaean Religion and its Survival in Greek Religion*, Introduction; *idem*, *Homer and Mycenae*, Chapter II; Demargne, *La Crète dédalique*, pp. 91-98; Harland, "The Peloponnesos in the Bronze Age", *Harvard Studies in Classical Philology*, XXXIV, 1923, pp. 1-62, esp. pp. 40, 56-62; Holland, "The Danaoi", *Harv. Stud. in Class. Phil.*, XXXIX, 1928, pp. 59-92, esp. pp. 91 f. According to Holland, one branch of the Greek tribes came to Greece about 1500 via Anatolia; it is tempting to regard Anatolia as the original inspiration for the primitive prototypes, but this hypothesis at present at least is weakened by the absence of any altars from the period 1500-1000. In general, see Myres, *Who Were the Greeks?*; also *A.J.A.*, LII, 1948, No. 1.

In any case, there can be no doubt that a separation of sufficient duration to produce the known difference in speech would also be sufficient to permit the development of a difference in religion.

⁴ It is probable that the religion of the Achaeans included some sacrificial practices, which were submerged in the onrush of Minoan civilization, and that traces of these lost elements are the purificatory fires at graves (§ 14), libations at the walled pits (§ 15), and the ceremonial fires (§ 13). It is also probable that the Neolithic hearth at Dhimini (§ 16) and the Helladic ceremonial fires (§ 18) indicate practices related to sacrifices. If these probable premises are correct, the quite rapid absorption of the Dorian sacrifice by all the other Hellenes becomes all the more understandable.

at Ionian Samos, dating about 1000 B.C. (§ 46, No. 1), and at Dorian Olous, probably dating in the tenth century (§ 34, No. 1). The two next earliest altars are altar I at the Dorian sanctuary of Orthia at Sparta (§ 47, No. 1) and altar II at Samos (§ 46, No. 2), both of the middle of the ninth century. These three earliest sites show a wide geographical distribution—Asia Minor, Crete, Peloponnese, and also both Ionian and Dorian use of the altar. Thus, our first glimpse of the altar in the tenth century shows it when it had already become common property of all Greeks. We can know nothing of the exact stages of the spread of the altar during the two preceding centuries, until much more archaeological material from that period becomes available. In view of the extreme paucity of excavated sites of the period 1200-900 (due to a cessation of building activity), it is not surprising that the earliest known altar is one or two centuries later than the presumed date of its first appearance in Greece, nor is it significant that the earliest known Dorian example may be slightly later than the earliest known Ionian example, for until now very few Dorian sites of this period have been excavated.⁵ Even so, two Dorian sites and only one Ionian site are represented in the tenth and ninth centuries.

One primitive altar prototype of the Dorians probably was a simple large cubical stone heap or earthen mound, used at ceremonies attended by the entire clan or village. The other primitive prototype would naturally be the temporary or permanent hearth, which would be sufficient for the simpler celebrations of individual families. Confirmation of the hypothesis that both types existed originally and were so distinguished, is seen in the fact that outside of Cyprus monolithoid and monolithic altars (which are used chiefly by small groups) appeared relatively late and developed slowly: until the appearance of these types, hearths, either permanent or temporary, must have been used for the celebration of families and other small groups. And even in post-Classical times, houses at Colophon have altars which show clear affinity to the hearth (§ 66, Nos. 1, 2).

The derivation of the various types of altars may now be summarized as follows: from the primitive prototype of a cubical mound are derived ceremonial altars and low monumental altars; from the

⁵ Cf. Robertson, *A History of Greek and Roman Architecture*,² pp. 320-337.

primitive prototype of a hearth are derived hearth altars and ground altars; from Mycenaean walled pits are derived well altars; stepped monumental altars are an evolution of ceremonial altars, under the influence of Anatolian forms; sacrificial pits are probably an innovation, inspired by religious needs; all other important types are derived from these types, according to the dictates of functional needs or religious concepts. The development of the numerous non-autochthonous altar types was so gradual and so in accord with the general progress of Greek architecture, that after 1000 B.C. any outside contribution to the diversification of Greek altars must have been minor.

44. Characteristics of Period. In the Aegean sphere the types of altars known in the pre-Classical period, and the date of their first appearance, are as follows: ceremonial altars, and probably hearth altars, tenth century; low monumental and probably well altars, ninth century; stepped monumental, ground altars, and a monolithoid altar, eighth century; monolithic altars, probably before the sixth century; hollow ceremonial altars, about the middle of the sixth century. Thus, by the early eighth century almost all the important types of Hellenic altars had already appeared, monolithic and colossal altars being the only important later additions. The chief types show remarkable continuity and uniformity throughout the Hellenic era, and the differences between the pre-Classical and later periods are minor.

Ceremonial, stepped monumental, and low monumental altars are the three most important types of altars in the pre-Classical period. They are structures of ashlar masonry (at least in the outer faces), which are considerably larger than the maximum size practicable for monolithic construction. In the Classical and post-Classical period low monumental altars lost their popularity, while monolithic altars became very common. The types are discussed below in the order of their first known appearance. The list in each section is arranged chronologically. Additional material pertaining to this chapter will be found in Chapter IV, §§ 61 B, 65, 66, 73, 80-86, 89.

45. Chthonic Altars. Chthonic divinities (of the earth or nether regions) were differentiated from Olympian divinities (of the sky), and altars and sacrifices of chthonic divinities differed from those of Olympian

divinities.⁶ The distinction between sacrifices to chthonic and Olympian deities existed long before Classical times, as is seen from the burning of whole animals in sacrifices to the dead in Homer,⁷ as well as from the existence of clearly chthonic altars as early as the ninth century. Although these distinctions were never observed rigidly, they were elaborated, rather artificially, in the post-Classical period, and most of the literary testimony is of still later date.

Olympian sacrifices were called *θυσίαι*, and the victims *ιερέια*, while chthonic sacrifices were called *ἐναγισμοί*, and the victims *σφάγια* or *ἐναγίσματα*. At sacrifices to Olympian deities the altar was raised high above the ground, and the victim was slaughtered with its head turned toward the sky; at sacrifices to chthonic divinities the altar was raised only slightly above the ground, was level with the ground, or was a trench, and the victim was held with its head turned toward the earth. Athenaeus, IX, 78, 410, states that in performing a sacrifice to the dead (who were always considered to have chthonic character⁸), one faced west and performed the ceremony over a trench (*βόθρυος*), but in sacrifices to the other gods, one faced east and stood on a raised platform. A further distinction in the ritual of chthonic sacrifices was made between the act of slaughtering the victim over a depression into which the blood flowed (in order to reach the nether world), and the act of immolation. These two acts could be performed at the same spot

⁶ The literary evidence relating to chthonic and Olympian worship is summarized by Jessen in P.-W., III, col. 2524, *s.v.* "Chthonios"; the literary evidence is discussed concisely and clearly by Jane Harrison, *Prolegomena*,² pp. 12, 55-69; very useful is the synthetic study by Robert, *Thymélé*, who discusses round buildings of chthonic use, chthonic altar types, nomenclature, and chthonic ritual (see Table des matières); see also Nilsson, *History of Greek Religion*, p. 250; on the concept of chthonic divinities see Peterich, *Die Theologie der Hellenen*, pp. 145 f.; chthonic sacrifices are discussed by Stengel, *Die Griechischen Kultusaltertümer*² (Müller Handb.), pp. 124-127; cf. A. D. Nock, "The Cult of Heroes", *Harv. Theol. Rev.*, XXXVII, 1944, pp. 141-174; Cook, *Zeus*, II 1, pp. 256 f. Ancient statements relating to chthonic altars are cited by Schwartz, *Scholia in Euripidem*, I, p. 286 (Appar.). On the apparatus for chthonic libations see Oikonomos, *De Profusionum Receptaculis Sepulcralibus*, esp. pp. 8 (bothroi), 22 f. (bottomless kernoi).

⁷ E.g. *Odyssey*, XI, 23-50, the sacrifice to Teiresias.

⁸ But in Roman times even this principle was disregarded, as is seen by the dedication of altars to "Emperor Hadrian, Olympian god and founder", § 61, Nos. 7-11.

or at different locations; in the latter case, two separate altars of appropriately different type might possibly exist, or more probably an altar proper and a crude depression⁹ (cf. §§ 84, 85).

The chthonic types of altars are: low monumental, hollow ceremonial, masoned well altars, monolithic well altars, ground altars, and sacrificial pits. At least two of these types are of autochthonous origin (well altars) and at least one type is of non-autochthonous origin (low monumental). From the pre-Classical period a total of 12 to 14 chthonic altars are known, of which five to seven are from Magna Graecia. Twenty-five chthonic altars of later date are known, one of which is from Magna Graecia (§ 52, Nos. 6, 7). In two cases chthonic altars rest on a high platform (§ 76, no. 4; § 74, No. 3). Chthonic altars are characterized by the absence of a prothesis and/or by a depression in or through the top.

Ancient nomenclature for the various types of chthonic altars suitable for modern use, did not exist. Besides, the available testimony is from late authors, and is vague or contradictory, as is seen in the following illustrative quotations:^{9a}

1. ἐσχάρα μὲν κυρίως ὁ ἐπὶ τῆς γῆς βόθρος ἔνθα ἐναγίζουσι τοῖς κάτω ἐρχομένοις, βωμός δὲ οἷς θύουσι τοῖς ἐπουρανίοις θεοῖς· νῦν οὖν βώμιοι ἐσχάραι τὰ κοιλήματα τῶν βωμῶν. (Schol. ad Eurip. *Phoen.*, 274.)
2. τοῖς μὲν Ὀλυμπίοις θεοῖς ναοὺς τε καὶ ἔδη καὶ βωμοὺς ἰδρύσαντο, χθονίοις δὲ καὶ ἥρωσιν ἐσχάρας, ὑποχθονίοις δὲ βόθρους καὶ μέγαρα. (Porph. *de antr. nymph.*, 6.)
3. τὸ δὲ μέγαρον ἢ περιφωδομένη ἐστία, ἔνθα τὰ μυστικὰ τῆς Δήμητρος. (Ammonius, *s.v.* βωμός.)
4. Ἀμμώνιος ἐν τοῖς περὶ βωμῶν ἐσχάρας φησὶ καλεῖσθαι τὴν μὴ ἔχουσαν ὕψος ἐστίαν, ἀλλ' ἐπὶ γῆς ἰδρυμένην κοίλην. (Harpocr., *s.v.* ἐσχάρα.)
5. ἐσχάρα ἢ ἐπὶ γῆς ἐστία στρογγυλοειδής. (Phot., *s.v.* ἐσχάρα.)

⁹ The relevant literary and archaeological evidence has been studied and clarified for the first time by F. Robert, *Thymélé*, pp. 159-180, 338-358, etc.; his general conclusions are compelling, but it is difficult to include the altars of the sanctuary of the Chthonic Deities at Akragas in his series of paired altars (*autels doubles*), for reasons indicated below in this section. His interpretation may, however, be applicable to the three altars *inside* the west wing of precinct 2 at Akragas. In any case, I hope to discuss the *ritual function* of the various types of altars in a more appropriate context. On the significance of fire in sacrifices, see Eitrem, *Opferritus und Voropfer der Griechen und Römer*, pp. 133-197.

^{9a} Cf. Tresp, *Frag. griech. Kultschrifteller* (R.G.V.V., XV, 1914), esp. frag. 48.

The testimony of these quotations may be outlined as follows:

(a) Altars are divided into two kinds (1) or three kinds (2).

(b) The *eschara* is a "pit built on the ground", but the term is also used in a generic sense of chthonic altar (1); the *eschara* is not a pit (2); the *eschara* is a "low hearth, built on the ground with a depression" (4); or simply a "round hearth on the ground" (5). *Eschara*, however, also preserved its usual meaning of hearth or fireplace (1).

(c) The *megaron* is a "built up hearth" (3), not an *eschara* (2). *Eschara*, therefore, refers rather to the well altar, and *megaron* refers to the hollow ceremonial altar.¹⁰

The distinction between Olympian and chthonic altars is seen most strikingly in three noteworthy instances in which the same deities evidently had both a chthonic and an Olympian status: an Olympian altar to the east and a chthonic altar to the west existed at the temple of Zeus Meilichios in the sanctuary of Malophoros at Selinus (§ 52, Nos. 6, 7); in precinct 1 of the sanctuary of the Chthonic Deities at Akragas (§ 35, Nos. 2-5); and, except that the chthonic altar was placed to the south of the precinct, at precinct 2 in the same sanctuary; see also p. 216.

The distinction between chthonic and Olympian altars, however, was not always observed, and altars properly of Olympian type could be used for chthonic deities. For example, a sixth-century vase painting of the sacrifice of Polyxena (to a chthonic divinity) shows Neoptolemos plunging a sword in her neck: the blood falls on the mound, on top of which is a rectangle of logs or stones from which flames rise.¹¹ Two reliefs in Athens of the fourth century shown ordinary monolithic altars before Zeus Meilichios, although, according to literary and other evi-

¹⁰ On the meaning of *estia*, *thymele*, and *eschara*, cf. Reisch, P.-W., I, cols. 1664-1667; see also Robert, *Thymèle*, Index, s.vv.; Gow, *J.H.S.*, XXXII, 1912, pp. 213-238; Robinson, *Olynthus*, VIII, p. 188; X, p. 162; XI, p. 190; XII, pp. 201-203, pp. 458, 459, with ancient and modern references, especially Keramopoulos, *Arch. Deltion*, XII, 1929, pp. 89 f.; Marinatos, *B.C.H.*, LX, 1936, pp. 226-239. Vitruvius, IV, 9, merely says: *Iovi omnibusque caelestibus quam excelsissimae [arae] constituentur; Vestae, Terrae, Marique humiles conlocentur*.

¹¹ Walters, *J.H.S.*, XVIII, 1898, pp. 281-288, pl. XV; cf. Jane Harrison, *Prolegomena*,² p. 62, fig. 8. The mound, however, may represent the grave of Patroclus. For another mound-shaped altar or omphalos, covered with a cross-hatching pattern, cf. Gerhard, *Auserlesene Vasenbilder*, 223 (Munich 124); Middleton, *J.H.S.*, IX, 1888, p. 301 f., fig. 11.

dence, the ritual in sacrifices to Zeus Meilichios was always chthonic.¹² Hero reliefs (§ 61, Nos. 50-60) show ordinary monolithic altars dedicated to the dead, and in Roman times grave altars had the same form as ordinary monolithic altars.

The converse may also be true: in some instances entire animals (often alive) were burnt in pyres to Olympian deities.¹³ These rites may be chthonic sacrifices to gods who, though normally Olympian, were worshipped as chthonic deities at those festivals; or the pyres and the burning of entire animals may not have been considered chthonic sacrifices at all. The rites are obviously traditional from an era when distinctions between chthonic and Olympian ritual were less developed.

An interesting chthonic sanctuary of the sixth century was found in a cemetery at Corinth. It is a small shrine cut partly out of the rock, with the probable location of a monolithic altar indicated. A layer of ashes containing burnt bones of lambs and pigs extended over the floor. Both the base of the altar and the base of the columns are placed in excavated depressions, below the level of the floor.¹⁴

46. Ceremonial Altars. Ceremonial altars are simple cubical structures with a projecting molding above and below; at least four examples below have a platform on the east side called prothesis, for the sacrificant. With three or four early exceptions, the construction is ashlar. Visible and invisible structural division, when either is present, are always horizontal: the prothesis is formed by the extension of the base course of the altar; the upper and lower horizontal moldings are not interrupted by perpendicular members; perpendicular moldings are not used; and the courses carrying the horizontal moldings and the prothesis course are carried through the body of the altar more carefully than the other courses. Ceremonial altars consist of two parts: the base course (or base and prothesis course, when there is a prothesis), and

¹² For the reliefs, see Svoronos, *Das Athener Nationalmuseum*, pp. 436 f., pl. LXX, 4; Cook, *Zeus*, II 2, p. 1106, figs. 942, 943; for the character of Zeus Meilichios, see *ibid.*, pp. 1091-1160.

¹³ Nilsson, *Griechische Feste*, Index IV, s.v. *Jahresfeuer*; *idem*, *J.H.S.*, XLIII, 1923, "Fire Festivals in Ancient Greece", pp. 144-148 (both with further references, especially to Pausanias); Romaos, *Arch. Delt.*, X, 1926, pp. 27-33; Papadakis, *Arch. Delt.*, V, 1919, *Parart.* pp. 25-33.

¹⁴ Morgan, *A.J.A.*, XLI, 1937, pp. 546 f., pls. XIII 2, XIV; Broneer, *Hesperia*, XI, 1942, pp. 142-145.

the body of the altar. The body of the altar consists of the dado and the upper and lower moldings. Frequently there is a foundation below the level of the ground, or else the prothesis and base course is partly covered. In the list below, measurements "in plan" refer to the base course or base and prothesis course.

Ceremonial altars are the earliest altars. Twenty-one pre-Classical altars belong to this type. Most of them belong to temples, to the east of which the altar is usually situated, and some are in sacred precincts or country shrines. The smallest measurements in plan are 1.80 m. and 2 m. length, and 1.20 m. and 1.22 m. width, at the base course or base and prothesis course. The two largest altars measure 4.50 m. by 4.50 m., and 4.50 m. by 2.50 m. The average length is 3.3 m., and the average width about 2.05 m. This gives a ratio of length to width of 1.6:1, which is usually followed rather closely. In one case (altar I at Aegina, No. 7) the ratio is 3.75:1, and one altar is square (Akragas, altar 9, No. 16). These unusual ratios occur in altars which in other respects conform to the standards of ceremonial altars. The series of pre-Classical ceremonial altars is remarkably homogeneous, and the variations in size are confined to narrow limits. The typical dimensions, therefore, may be said to be 1.80 m. to 4.50 m. length, and 1.20 m. to 4.50 m. width: these are also the extremes found.

Three altars listed below contain elements not normally associated with ceremonial altars. The altars at Cape Zoster (No. 19) and at the sanctuary of Anios at Delos (No. 21) have several steps. But their small size and horizontal structural division place them within the type of ceremonial rather than stepped monumental altars. Both altars date near the end of the archaic period. The altar proper at Cape Monodendri (No. 13) is ceremonial, while the entire structural complex is a colossal altar. Altars I and II at the Samian Heraion (Nos. 1, 2) are not fully developed ceremonial types, and are obviously transitional from the primitive prototype. For the barrier see pp. 104-107, 131, 178.

1, 2. The Heraion at Samos. Among the sacred sites which were occupied continuously from pre-Hellenic times to the end of pagan times, few have left remains so impressive—indeed, so inspiring—as the Heraion at Samos.¹⁵ In the lowest stratum there are remains of

¹⁵ Buschor and Schleiff, *Atb. Mitt.*, LVIII, 1933, pp. 146-173, figs. 1, 2, 10-16, suppl. pls. XLV-LIII. Altar I can be identified as an altar only by

Mycenaean buildings of the eleventh century or earlier. Above this stratum, grounded in a Mycenaean or sub-Mycenaean stratum, there is a simple rectangular altar of rubble. About this altar as a core, six more altars were built in succession during the geometric and archaic periods, each altar (except the last) a little larger than the previous one; in the late archaic period a much larger eighth altar was constructed over the earlier altars, and in the late Roman period it was rebuilt as the ninth altar. This series extends in unbroken continuity from the dawn of Hellenic paganism to its extinction, that is, from *ca.* 1000 B.C. until after the fourth century A.D.

Altars I and II described here are simple ceremonial altars, while altars III to IX are fully developed stepped monumental altars, under which heading they are discussed (§§ 48, 71). Altar I is from the early tenth century. It is the earliest Hellenic altar known, and is already a comparatively well formed ceremonial altar. Fig. 67.

Altar I is grounded in level 86 (i.e. 0.86 m. above the datum line), measures approximately 2.40 m. by 1.30 m., and is preserved to a maximum height of 0.60 m. It is constructed of irregularly shaped slabs bound with mortar, with the outer side in alignment with the face of the wall, so that the face of the wall is even. Only the east wall is preserved to its full length. Altar II, dating in the middle of the ninth century and measuring *ca.* 3.30 m. by 2.30 m., is grounded at level 101 and is preserved to a height of 0.60 m. Altars I and II are of the same construction, and both are simple rectangles filled with earth. They had no steps or prothesis. Hekatompedos I was built to face altar II, which is *ca.* 17 m. east of the temple, on the main axis of the temple. The altar, however, did not face the temple, being oriented 30° south of east. Under Hekatompedos II was a base which probably carried the xoanon contemporary with altar II.

Hera was there the Hellenic successor to the Minoan Goddess, who had been worshipped at the same place in pre-Hellenic times. This is suggested by the earlier Mycenaean occupation of the site, by the date of the altar I, and by the fact that down to post-Classical times a willow was still venerated there as sacred to Hera, according to Pausanias, VII, vi, 4. Roman coins also show the willow before the Heraion.

It is probable, as suggested by Schleif, that the sacred willow was

analogy of the later altars; if this identification is rejected, some of the difficulties of chronology mentioned on p. 90 are resolved.

exactly on the axis of the early altars, where in Roman times a small chapel was built. The orientation of the original altars had been obscured in the sixth century by altar VIII, which faced the temple, and the position of the Roman chapel cannot have been fortuitous. It may also be possible to assume that a sacred willow had existed on the site of altar I, surrounded by an enclosure. This enclosed space, because of its sanctity, may have been converted into an altar when the sacred willow died. The chapel, then, would have been built over a location which had been preserved sacred since the sixth century as the "original" location of the ancient xoanon of the goddess.

3. Ephesus, The Artemision. In the cella of the temple of Artemis at Ephesus there is a structural complex consisting of the remains of five successive periods, from the eighth or seventh century to Hellenistic times.¹⁶ In period A (700 B.C. or earlier) this structure evidently was the enclosure of a sacred tree, with a platform for the xoanon or for the priest officiating at ceremonies. This was surrounded by a peribolos wall which was widened to form an altar east of the tree enclosure. The tree was worshipped as sacred to Artemis. Since nearly 700 of the 1000 objects found in the structure are of precious metal and in good condition, they must have been placed there as votive offerings. This late survival of pre-Hellenic tree worship is paralleled in the seventh-century sanctuary of period 4 at Agia Irini in Cyprus. The altar at the wall also recalls several early Hellenic examples from Cyprus of altars against the peribolos wall (§ 42).

The structure consists of two parts: a rectangle 4.34 m. east-west by 2.86 m., and a T-shaped later addition to the east, which is 2.88 m. long, 1.66 m. wide where it meets the rectangle, and 2.82 m. wide at the western end. The construction is ashlar, and five courses are extant on the west side of the rectangle to a height of 1.21 m. Inside and under the rectangular structure, 800 to 1000 objects of the eighth and seventh centuries were found including electrum coins, scarabs, and jewelry. The 73 electrum coins range

¹⁶ For the excavations of Temple D (of Kroisos) see Wood, *Discoveries at Ephesus*, especially pp. 258-261 and plan facing p. 262. For the earlier remains see Hogarth, *Excavations at Ephesus*, esp. pp. 33, 36, 52-65 and 247 (the base); 232-246 (the finds, except the coins); Chapter V "The Coins" (by Head), pp. 74-92. See also *Forschungen in Ephesos* (Oesterr. Arch. Inst.), I, pp. 221-234.

down to the end of the reign of Alyattes, *ca.* 560 B.C. Near the northeast angle of the rectangular construction a great number of vertebrae were found, probably of sheep or of goats. The only other structural remains are those of a peribolos wall, which encloses a space *ca.* 35 m. by 18 m. At *ca.* 10.50 m. to the east of the structural complex this wall had a thickness of 1.90 m. for a length of 2.00 m. to form an altar.

In the following three periods (*ca.* 610-550 B.C.) the structure, considerably enlarged, was in the cella of temples B, C, and D, respectively. Its massive construction and the fact that it is divided into two rectangles, indicate that it was the base of the statue of Artemis, with an offering table before it.¹⁷ Pausanias, X, xxxviii, 6, states that Rhoikos did the sculpture of the altar of Artemis Protothronia. Strabo, xiv, I, 23, (641) states that Praxiteles did the sculptures of the later altar. Both writers indicate that the altar was a structure of some splendor, but no traces of it were found.¹⁸

4. Messenia, Temple of Pamisos. The seventh-century temple of Pamisos at Agios Floros has a ramp leading from the stylobate to an altar at the other end of the ramp. In ancient times the area was marshy, and the expedient of a ramp was used in order to provide a space where the ceremonies would not be inconvenienced by the condition of the ground. Fig. 29.

The ramp is 1.80 m. wide and 6 m. long, and the altar is 4.50 m. by 2.50 m. in plan. Both are of massive blocks. The ramp is bonded with the substructure of the altar, and thus forms the prothesis on the east side. Only two blocks are extant above the substructure, and they are slightly recessed, so as to form a dado. The temple was 6.875 m. wide at the lowest step of the krepis. Below the cella was a spring-house, in which were found great numbers of votive objects. The spring is dry today, as are other springs which until recently issued from the ground near the temple. Valmin, *Swedish Messenia Expedition*, p. 425, plan VII.

5, 6. Vroulia, Acropolis. The village of Vroulia in Rhodes was in existence only during the period 650-550, and its walls were probably built soon after 650. Contemporary with the walls is the principal sanctuary on the acropolis of Vroulia, which was built in a tower in the north corner of the walls; in front of it, inside the acropolis, there was a walled off trapezoidal

¹⁷ For a discussion of a frieze which may belong to the base in temple D see Hogarth, *Excavations at Ephesus*, pp. 14 f.

¹⁸ See Wood, *Discoveries at Ephesus*, illustrations pp. 266 f., for representations of the altar on coins.

court.¹⁹ The court is oriented southeast-northwest, while the temple is oriented almost east-west. Toward the far end of the court, to the south of the eastern entrance of the temple, there are two rectangular altars of rubble with a core of earth mixed with pebbles. One is 2.62 m. by 1.45 m., preserved to a height of two courses. The other is 2.40 m. by 1.35 m., preserved to a height of three courses.

Since they are not oriented as the temple, but are oriented as are the graves of the cemetery, the excavator suggests that these two altars

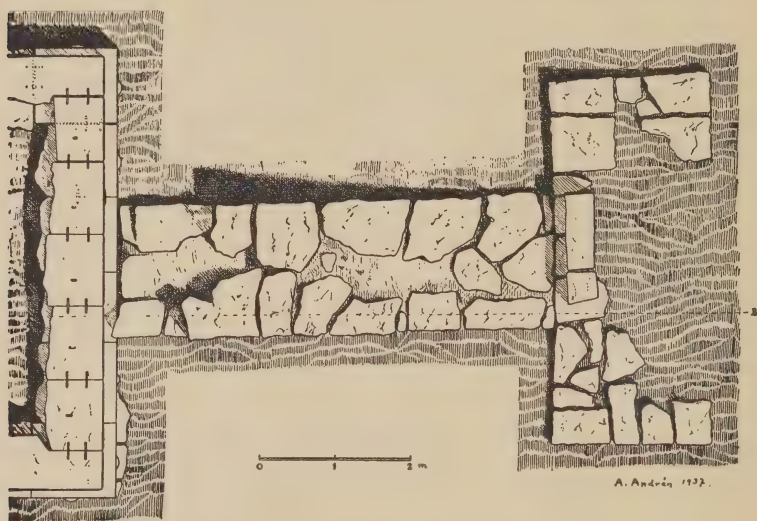


FIG. 29. Messenia, Temple of Pamisos. Ceremonial altar (right) and ramp.
(§ 46, No. 4)

were dedicated to heroised dead. It is more probable, however, that these altars were dedicated to an olympian divinity, since they seem to be rather high, and their orientation is very near that of the court. At least one of the altars must belong to the shrine.

Against the south wall of the temple there is a fireplace which consists of two upright slabs placed at right angles to the wall 0.90 m. from each other. This identification is the natural one, and since no

¹⁹ Kinch, *Vroulia*, col. 98, figs. 27a and b, map. Kinch suggests some ceremonial purpose for two cavities in the walls of houses, at the level of the floor, cols. 117-119.

certain altar has been found of this shape elsewhere (see § 41 for similar Cyprian hearths), the excavator's identification of this structure as an altar must be rejected. Near the fireplace is a refuse pit 0.62 m. by 0.52 m. in plan and 0.60 m. deep, in which were found vase and terracotta fragments. There were no traces of fire, and it is doubtful that they are sacred refuse. In any case, it is difficult to accept the excavator's designation of a sacrificial pit.

7, 8. Aigina, Temple of Aphaia. The two earliest altars, of which remains are described below (§ 48, No. 20), were probably ceremonial altars. They date, respectively, in the second half of the seventh century, and in the middle or second half of the sixth century.

9, 10. Athens, Precinct of Athena Nike. Under the spot where the fifth-century altar of the temple of Athena Nike was placed, there was found a sixth-century rectangular altar base of poros blocks, 1.80 m. by 1.30 m., forming a high plinth base with a kind of cyma profile. This was in the center of the temenos of Athena Nike, which at that time had no temple. When the temple was built in the sixth century to the west of the altar, its orientation was determined by the old altar, over which a new one of marble was decreed to be built according to *I.G.* I², no. 24, of 448 B.C. A still older altar may be indicated by remains at a lower level.—Picard, *L'Acropole, L'Enceinte, etc.*, p. 21; Judeich, *Topographie von Athen*,² p. 218; Cook, *Zeus*, III 2, p. 1196; *B.C.H.*, LXI, 1937, pp. 443 f., figs. 6, 7.

11. Mt. Anchesmos, Attica. On the northern peak of Mt. Anchesmos, now known as Tourkovouni, there is an altar within an enclosure. "The altar itself is built in one main course, with small pieces fitted in, of masonry in the (early) Lesbian style." Geometric sherds were found about. The altar probably dates in the sixth century, especially since Lesbian masonry ceased to be used after 480 B.C.²⁰—Dow, *Classical Weekly*, XXXV, 1941-42, p. 106, where reference is made to Wrede, *Attica*, pl. 9.

12. Boeotia, Acropolis of Halae. At the east end of the early sixth-century precinct on the acropolis of Halae there was found a rectangular foundation 3 m. by 1.29-1.30 m. consisting of a row of ashlar, which have their upper surface finished smooth. "This rectangle was probably the foundation of the altar or possibly a step or narrow framework within which the

²⁰ Scranton, *Greek Walls*, p. 43.

vertical slabs forming the altar rose.”—H. Goldman, *Hesperia*, IX, 1940, pp. 397-399, fig. 22; cf. p. 430.

13. Miletus, Cape Monodendri. On Cape Monodendri near Miletus there was a ceremonial altar of Poseidon on a raised platform, with a staircase on the west. The platform is 11.09 m. by 9.47 m.; the staircase and paved

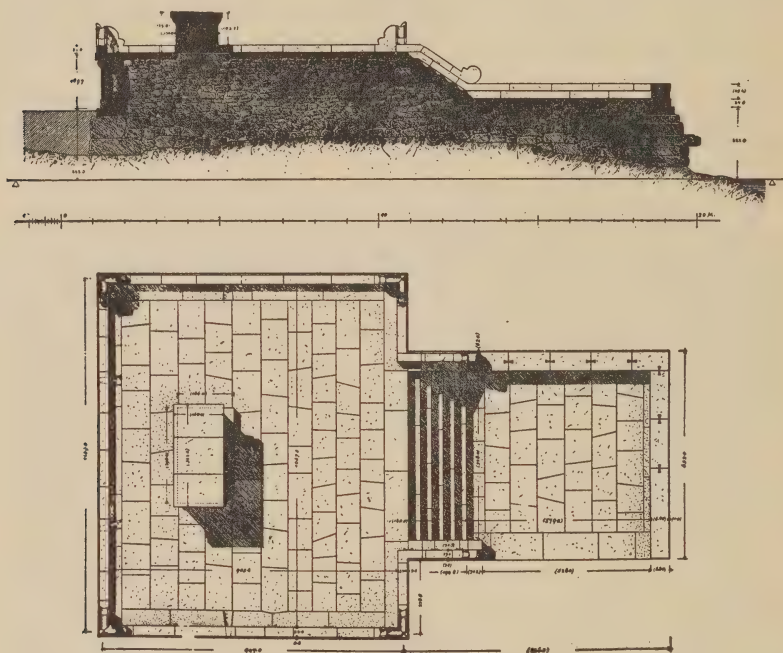


FIG. 30. Miletus, Cape Monodendri. Ceremonial altar of Poseidon.
(§ 46, No. 13)

approach, 8.36 m. by 6.25 m.; and the altar was probably 3.22 m. by 1.90 m. in plan, and 1.25 m. high, with a prothesis and base course 0.215 m. high. Architectural elements of the altar have been recovered showing that it had an egg and dart and bead and reel in the upper molding, and was painted red. The ornament and construction place the altar in the first half of the sixth century. The large platform of this altar is unique in this period for any type of altar and probably in the following periods for a ceremonial altar. The entire structural complex is a colossal altar (§ 74), and evidently is the pro-

totype of the later colossal altars.—*Milet*, I 4, Wiegand, *Der Poseidonaltar bei Kap Monodendri*, esp. pp. 11, 15, pls. XVI 2, XXIII. Fig. 30.

14. Athens, Agora. To the east of the sixth-century temple under the stoa of Zeus Eleutherios in the Athenian agora there is a single course of unequal ashlar (Kara and Acropolis limestone) in headers, oriented roughly as is the temple. Cuttings in the rock give the original length as *ca.* 3.65 m. and the width at least as 1.22 m. Since Geometric and early sixth-century potsherds were found associated with the altar, but working chips of Pentelic marble were found in the footing trench (instead of island marble, as would be expected from the early pottery), the date of the altar is in the third quarter of the sixth century. This altar, possibly having suffered from the Persians, was covered by the levelling which took place in the fifth century. To the west of the altar at a contemporary level was a deposit of ash and charcoal. The excavator has shown that this altar is probably the one at which the archons took their oath of office.—Thompson, *Hesperia*, VI, 1937, pp. 10-12, fig. 5; cf. pp. 73 f., 112.

15-18. Akragas, Sanctuary of Demeter and Kore (§ 35, Nos. 2-5). (a) Altar 6 is to the east of precinct 2, before the entrance. Only the base course is extant (2.75 m. by 2.22 m.), consisting of ashlar and showing traces on the west side of a prothesis *ca.* 0.60 m. wide. (b) Altar 9 is the largest ceremonial altar in the sanctuary. Extant are two courses of ashlar, forming a base *ca.* 4.50 m. square. This altar is near altar 8, the largest well altar in the sanctuary, both being between precinct 2 and temple 1. (c) Altars 12, 13, and 14 are situated south of temple 1 and to the west of the so-called temple of the Dioscouroi. Altar 12 is extant in one course only and is adjacent to well altar 11; it is probable that altar 12 is not an altar, but the base of a statue or some kind of ceremonial stand. Altars 13 and 14 are virtually identical: each altar is extant in two courses of ashlar, of which the lower course forms a foundation (plan 2.90 m. by 1.70 m. and 2.50 m. by 1.80 m., respectively), and the upper course is recessed slightly (plan 2.23 m. by 1.52 m. and 2.23 m. by 1.53 m., respectively). Across the west side of each altar is a prothesis (width *ca.* 0.30 m.), which has the very unusual form of a recess in the upper course, instead of being a separate course.—Marconi, *Agrigento arcaica*: (a) p. 34, plans figs. 5 (p. 19), 7 (p. 25), and pl. III a; (b) p. 35, fig. 12; (c) pp. 35 f., fig. 13. (b) *Idem*, *Studi topografici e architettonici agrigentini*, pp. 33 f.; *idem*, *Agrigento, Topografia ed arte*, pp. 44-47, figs. 22, 23. Figs. 27, 62.

It is possible that altars 13 and 14 pertain to the temple to their

east, and that this temple is properly assigned to the Dioscouroi. Chthonic altars to the west of the temple would then be appropriate, and these altars could have been hollow ceremonial altars, even though they are on an elevated base (cf. § 76, No. 3). It is further possible that well altar 12 pertains to a feminine chthonic deity associated with the Dioscouroi in a triad.²¹

19. Cape Zoster, Attica, Temple of Apollo Zoster. At the east entrance of the temple of Apollo Zoster (end of sixth century) is an altar, 6.75 m. from the cella entrance (the temple has no krepis), on the axis of the temple, and properly oriented. It is 4.25 m. by 2.55 m. in plan, of rather large ashlar

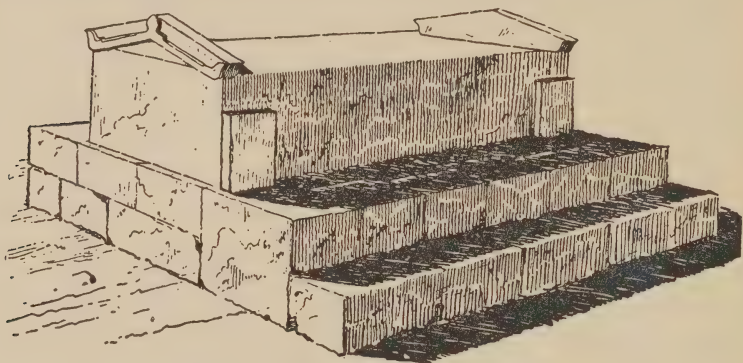


FIG. 31. Cape Zoster. Altar of Apollo.
(§ 46, No. 19)

with an earthen core. The base course is preserved on all sides but the east. Near the western side of the altar, on either transverse side, there are cuttings for a stele. Almost touching the front of the altar is a row of low ashlar extending past the north side of the altar. Nearby was found part of the top of a gabled tympanum. From this evidence the altar is reconstructed as having a prothesis 0.90 m. wide on the west side at the level of the top of the base course, with a body of undetermined height carrying a gabled barrier at either end. The east wall of the body may have been set back from the rear wall of the altar. The row of ashlar on the west side of the altar probably supported a low step (below the prothesis). In form this altar combines elements of ceremonial and monumental altars, in that it has the horizontal structural

²¹ Cf. Chapouthier, *Les Dioscures au service d'une déesse*, esp. pp. 127-137.

division of the former, but a step up to the prothesis as do the latter.—Kourouniotes, *Arch. Delt.*, XI, 1927/8, pp. 9-53, figs. 6, 7 (plan), 26-29. Fig. 31.

20. Miletus, Delphinion. Toward the west end of the Delphinion at Miletus there is extant in two building stages the lowest course of an ashlar structure *ca.* 4.01 m. by 3.43 m. in plan. The excavator attributes to it certain late sixth-century sculptural decorations and in particular two series of volute acroteria with foliate elements which may have been placed over the corners of the body of the altar.—*Milet*, I 3, Wiegand, *Das Delphinion in Milet*, pp. 151-153, figs. 35-40, pls. I, IV, VI, VII.

21. Delos, Sanctuary of Anios. The small temple of Anios, of about 500 B.C., is 3.675 m. by 2.54 m. in plan, and faces south. It is near the north-east corner of the Agora of the Italians. On the west side of the temple is the krepis of an altar also facing south, touching the krepis of the temple but not bonded with it, measuring 3.45 m. north-south by 3.02 m. east-west. The altar is probably contemporary with the temple. Preserved are the three lowest courses above the euthynteria, from which it can be ascertained that the altar had four or five steps with no antae; at the level of the prothesis the altar was about 2 m. wide; somewhat more than half of this space would be occupied by the body of an altar. Both the altar and the temple may be considered miniature reproductions on a scale of about 5:1, rather than true members of the classes of structures whose plans they reproduce.—Vallois, *B.C.H.*, LIII, 1929, pp. 198-201, figs. 3-7, plans pls. VI, VII; Lapalus, *Délos*, XIX, plan fig. 2 following p. xii.

[22.] Selinus, Sanctuary of Demeter Malophoros. A possible example of a ceremonial altar is mentioned below, § 47, Nos. 5, 6.

Vase Paintings. The appearance of the ceremonial altars can be seen in several archaic vase paintings.

23. Munich. On a Klazomenian vase (sixth century) 16 maidens are represented holding hands dancing about an altar. The altar reaches up to the height of the shoulders of the maidens. It is of ashlar blocks and has a low prothesis extending in front of the altar. A fire or coals and ashes are visible on top of the altar.—Sieveking and Hackl, *Die Königliche Vasensammlung zu München*, I, pp. 56 f., pl. 20. Fig. 68.

24. From Olynthus. On a black-figured vase from Olynthus dating 550-540 the scene of Herakles and Busiris is represented. The altar is constructed



FIG. 32. Vase from Olynthus. Representation of ceremonial altar.
(§ 46, No. 24)



FIG. 33. Cylix by Hieron. Representation of ceremonial altar.
(§ 46, No. 26)

of irregular ashlar laid in courses, and reaches the height of the shoulders of the Egyptians. The altar is seen from the rear, and at either end two blocks laid upright extend above the rest of the altar so as to form barriers to the right and left of the sacrificer.—D. M. Robinson, *Olynthus*, V, pp. 69 f., pl. 46. Fig. 32.

25. London, British Museum. A black-figured Boeotian vase (sixth century) represents a large rustic gathering at a sacrifice. To pass over other interesting elements of the scene, the altar of ashlar in isodomic courses, which reaches approximately the height of the chest of the celebrants, is seen in side view and has a fire burning ready for the sacrifice. The altar is without prothesis, but the rear wall of the altar extends above the rest of the altar to form a barrier, which perhaps extends partway around the sides.—Pfuhl, *Malerei und Zeichnung der Griechen*, III, pl. 39, No. 169; I, pp. 206 f., where further references; Smith, *J.H.S.*, I, 1880, pp. 202-209, pl. VII (in suppl. vol.).

26. Berlin. On a cylix by Hieron of ca. 500 B.C. there is a scene of maenads dancing about an altar. The altar is a very elegant structure with a triangular gable-like barrier at the end, which has a palmette acroterion and simple volutes at the corners of the gable. It can hardly be monolithic. Rather, it must be stuccoed over. The altar rests on a low plinth base.—Furtwängler, *Königliche Museen zu Berlin, Beschreibung der Vasensammlung*, no. 2290, pp. 581-584; *Wiener Vorlegeblätter*, Serie A, pl. IV. Fig. 33.

27. Vienna. On the Caeretan hydria of Herakles and Busiris (ca. 550) an ashlar ceremonial altar is represented with a simple upper and lower molding and three ram horns in front near the corner. The prothesis extends in front of the body of the altar. Scene similar to No. 24.—Pfuhl, *Malerei und Zeichnung der Griechen*, III, pl. 35, No. 152; Furtwängler-Reichhold, *Griech. Vasenmalerei*, pl. 51.

28. Berlin. On a black-figured vase of archaic style an ashlar altar is depicted. Some of the blocks are black, and others are gray. This is a common convention of vase painting, and does not necessarily mean that the altar was actually so painted.—Pfuhl, *op. cit.*, III, pl. 61, No. 241; I, pp. 270 f., where further references.

47. Low Monumental Altars. Low monumental altars are simple elongated cubical structures devoid of prothesis, and generally no more than waist-high. Their length is greater than the typical length of

ceremonial altars; with the exception of No. 5 below, the low monumental altars whose length is definitely ascertained, are at least 4 m. longer than the longest ceremonial altar. The plan of the base course is a simple elongated rectangle. Exact dimensions of only two low monumental altars are known, but it appears that the typical ratio of length to width exceeds 4 to 1, with known dimensions of 9 m. to 16.30 m. length and 1.50 m. to 3.15 m. width.

Seven low monumental altars occur at four locations, one of which is a rustic sanctuary. While low monumental altars occur as early as the ninth century, this type lost popularity in the Classical and post-Classical periods. Only three examples are known from these periods, one of them being at the site of an earlier low monumental altar.

This form of altar immediately suggests a chthonic altar, and all the altars of this class probably or certainly belonged to chthonic deities. Orthia at Sparta and Artemis at Corfu were probably worshipped as chthonic deities, and Herakles and Malophoros are certainly chthonic. Low monumental altars are, therefore, a chthonic type. It will be observed that four altars have about them considerable deposits with burnt sacrificial remains: the sacrifices at chthonic altars naturally required larger fires than those at Olympian altars, in order to consume entire animals instead of parts only. For barriers see Nos. 5, 6.

1-3. Sparta, Sanctuary of Artemis Orthia. In the space of the orchestra of the Roman theater at Sparta before the temple of Artemis Orthia the remains of four altars are successively superimposed: altar I, dating from the middle of the ninth century; altar II, dating from the late ninth century and lasting into the seventh; altar III, dating from the early sixth century and lasting to the birth of Christ or the second century A.D.; altar IV, which followed altar III and lasted into and perhaps past the fourth century A.D.²²

²² Dawkins, *The Sanctuary of Artemis Orthia*, Chapter I, pp. 1-51, contains the architectural discussion; see especially pp. 6-8, fig. 2, pl. I (altar I); pp. 8-15, figs. 2, 4, pls. I-VI (altar II); pp. 23-26 (altars III and IV); fig. 28 p. 49 (comprehensive chronological chart). In the text altar I is called the Earliest Altar, II the Archaic Altar, III the Greek Altar, and IV the Roman Altar. A much later chronology is proposed by Rodenwaldt, *Ath. Mitt.*, XLIV, 1919, p. 182; cf. H. Searls and Dinsmoor, *A.J.A.*, XLIX, 1945, p. 72, who argue that the sand stratum must date about 580.

For the origin and character of the cult, see Rose, "The Cult of Artemis Orthia", pp. 399-407 in Dawkins, *Artemis Orthia*.

The two earliest altars are separated from the two later ones by an artificial layer of sand 0.90-1.50 m. thick. Fig. 69.

The earliest remains are of the early ninth century. Toward the middle of the century the central area was paved with cobble stones from the Eurotas, and a precinct wall was constructed, enclosing an oval *ca.* 40 m. by 32 m. What is probably the foundation course of the west wall of altar I of this period is preserved 1.70 m. west of the west side of altar II. It is of undressed stones which extend westward from under the north end of altar II, then turn to form a row 2.20 m. long, exactly parallel to altar II. This is good reason for considering the remains those of an altar, which may have been nearly as long as its successor. During the period of use there accumulated a layer of blackened earth containing small fragments of burnt bones, which fact makes certain that the structure was an altar. The succeeding altar was grounded in this layer. To the east of altar II the layer was *ca.* 0.60 m. thick, and to the west, the front of the altar, *ca.* 0.30 m. thick. It is evident that this is the by-product of the sacrifices on altar I. The ashes were merely dumped around and especially behind the altar. Part of the deposit may come from altar II.

Late in the ninth century altar II was built, at the same time as the first temple. Most of the walls and core, and part of the projecting plain coping at the north end are preserved. The altar was 9 m. long, 1.50 m. wide, and 1.20 m. high. The walls are of rough dressed stones laid in irregular courses, and the core consists of stones merely piled inside the wall. The temple was oriented *ca.* 16° differently from the altar, and was probably *ca.* 4.30 m. wide. The stratum of blackened earth which accumulated from this and the preceding altar reached to within 0.60 m. of the top of the altar in the rear.

About 600 B.C. the layer of sand covered both the remains of the early temple and of the altars. On this layer of sand, oriented exactly as were the older altars and partly overlying them, there are remains of three walls of altar III: the south transverse wall 2.60 m. long, and the two longitudinal walls, which are preserved to a maximum length of 8.20 m. The maximum preserved height is 0.75 m. The base course of the west and south walls is a row of well cut poros ashlar laid in stretchers without mortar. Over this, and on the sand on the east side, the wall consists of odd slabs and small stones with mortar. The stratum containing Laconian III pottery (600-550 B.C.) which extends immediately over the sand elsewhere, is lacking near the altar, and this has led the excavator to place the first building of this altar after 550. Since, however, altar III is exactly parallel with altar II, and the two altars were separated by a layer of sand, while the orientation of the temple remained 16° divergent, it is impossible to allow a gap of approxi-

mately 50 years between the two altars. The altar must, therefore, date near 600.

In the Roman period there extended immediately above the sand a stratum *ca.* 0.30 m. thick from the east side of the altar to the foundations of the Roman theater. Above this stratum the wall of the altar is obviously later than below. The lower part may, therefore, be called altar III, and the upper, altar IV. A probable date for this reconstruction of the altar is *ca.* 225 A.D., when the Roman theater was built, and it probably lasted until the ascendancy of Christianity brought the sanctuary to an end in the late fourth or early fifth century A.D.

All these altars evidently were low monumental chthonic altars, without steps or prothesis, the same type being preserved throughout. The cult of Orthia was established by the invading "Dorians", and is not related to Mycenaean or Helladic cults. Orthia was a "nature goddess", especially of fertility and birth. That as a goddess of fertility of nature she was predominantly chthonic in character is indicated by her identification with Artemis, who had strong chthonic elements, especially when associated with Dionysus and Hekate.²³ The unbroken series of low monumental altars show that Artemis Orthia retained her chthonic character throughout thirteen centuries.

4(?). Mt. Hymettus, Sanctuary of Herakles. In a depression in the rock near the peak of Mt. Hymettus there are two parallel rows of stones 2 m. apart, preserved to a length of 4.80 m. Nearby was found a stone with the inscription $\text{HEP}[\alpha\kappa\lambda\eta\varsigma]$. Among the pottery finds nothing was later than the seventh century. It is suggested by the excavator that this was an altar of Herakles. The altar would be a low monumental one, such as would be suitable for Herakles, who was a chthonic deity.—R. S. Young, *A.J.A.*, XLIV, 1940, pp. 1-9.

5, 6. Selinus, Precinct of Demeter Malophoros (Fig. 34). The precinct of Demeter Malophoros to the west of Selinus was built soon after the founding of Selinus,²⁴ which took place between 651 and 623, and remained in

²³ Cf. Gruppe, *Griechische Mythologie und Religionsgeschichte* (Müller Handb.), II, pp. 1284-1290.

²⁴ The excavations in the earlier level are reported by E. Gàbrici, *Il Santuario della Malophoros a Selinunte*, *Mon. Ant.*, XXXII, 1927, cols. 1-420, pls. I-XCVII; see especially cols. 53-62, 126-155. Details about the later period also will be found there. Gàbrici's suggestion of steps on the east side of altar II is on all counts improbable.

use until 409. The earlier temple of the precinct was built in the seventh century, and to the east of it altar I of solid rubble was constructed, roughly rectangular, 3.50 m. by 2 m. in plan, and 0.80 m. high. It is oriented very nearly north-south, while the temple is not, the difference being 12° . It is grounded on the virgin soil. Its external faces are unusually irregular, and since the stratum which accumulated during the period of use of this altar exceeds the height of the altar (thickness of stratum 0.90-1.20 m.), it is clear that this is only the core, and that originally it was faced with dressed stone and measure²⁵ about 4.50 m. by 3 m. Figs. 35, 36.

In the early sixth century a new temple and altar II were built over a stratum of filling which raised the level of the area about the temple and the altar 0.50-1.00 m.²⁵ The new altar was a low chthonic altar 16.30 m. long and 3.15 m. wide, opposite the temple of Malophoros, which was 9.52 m. wide, and slightly to the east of altar I. It is oriented approximately north-south, its orientation diverging only 4° from that of the temple. Its center, however, is not on the longitudinal axis of the temple, but approximately on that of the propylaea to the east of the altar, which shows that it was also considered in relation to the propylaea. Since the ground slopes downward to the east, the east side of the altar is higher than the west side. The altar is remarkably well preserved, for not only is the greater part of the walls preserved, but also at the south end the three blocks which formed the barrier in the shape of a gable, and even a part of the brick tiles which covered the top of the altar, showing traces of fire. The top was hipbacked, and sloped equally toward each side, but a level space must have existed in the center, or other provision must have been made to retain the fire. Both the east and west sides consist of three courses, but on the east side the base, dado, and geison are separate, while on the west side the upper course includes part of the dado besides the geison. Two trenches were dug inside the altar. They show inside and below the altar six or seven layers of sand, earth with ashes, and remains of rubble work, reaching a total depth of *ca.* 2 m. Sacred ashes from earlier sacrifices were evidently used as filling for this altar. Between the altar and the temple was some kind of a fountain.

South of the propylaea is a large room in which are remains of a foundation 4.35 m. by 2 m. dating from the sixth century. It may be the base of a monument or less probably of a ceremonial altar.²⁶

²⁵ For the remains of the later period see Koldewey and Puchstein, *Griechische Tempel*, I, pp. 84 f.; II, pl. 11; Hulot and Fougères, *Sélinonte*, pp. 262-271.

²⁶ Gábrici, *Mon. Ant.*, XXXII, 1927, cols. 73-75, plan pl. II; Koldewey and Puchstein, *Griechische Tempel*, II, pl. 11 (marked I).

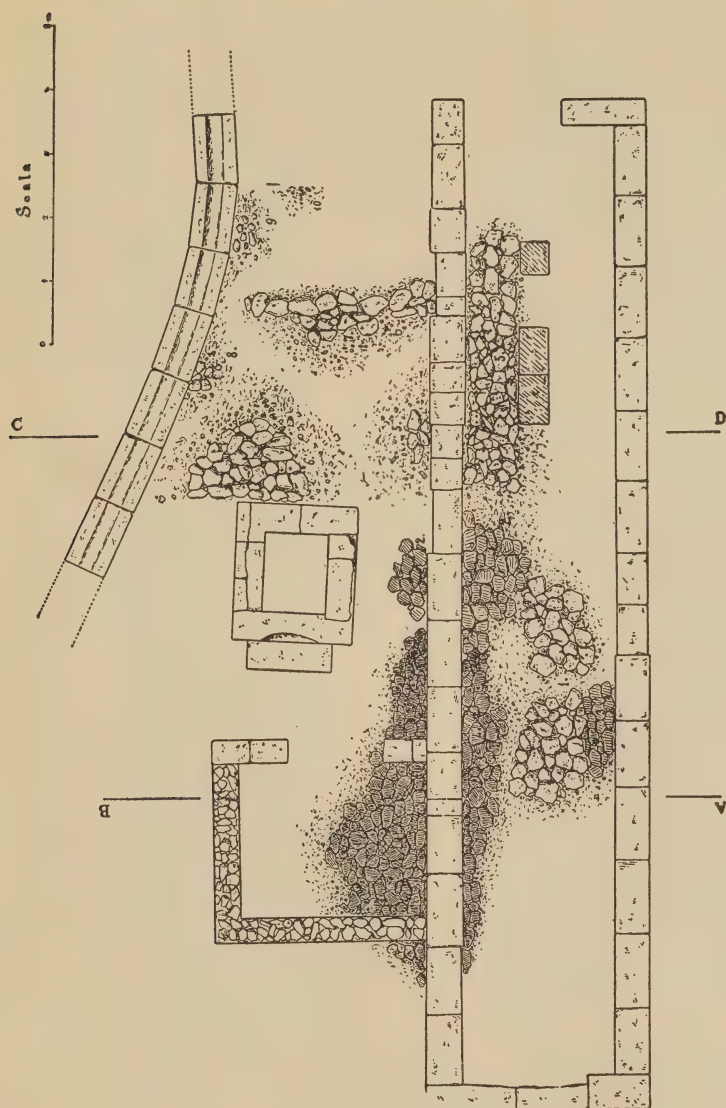


Fig. 35. Selinus, Sanctuary of Demeter Malophoros. Rubble remains of seventh-century altar and ashlar remains of sixth-century altar, both low monumental.
(§ 47, Nos. 5, 6)

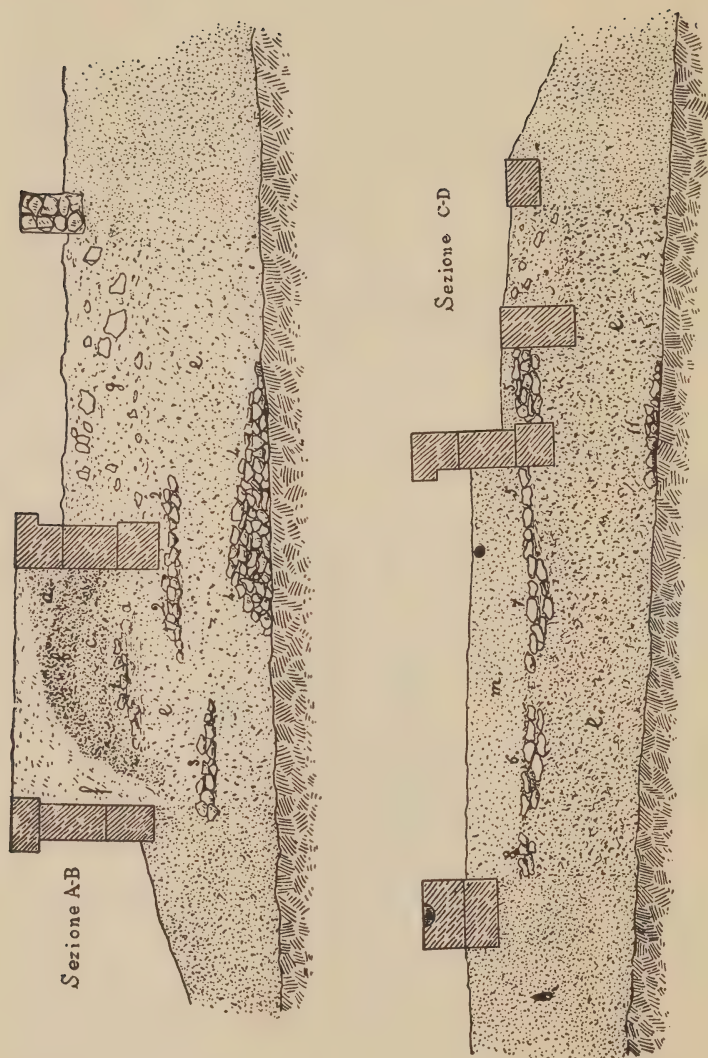


FIG. 36. Selinus, Sanctuary of Demeter Malophoros. Sections through archaic altars, as shown in Fig. 35. (§ 47, Nos. 5, 6)

Altar I probably was a low chthonic altar, similar to altar II. It is noteworthy that here, as at the altar of Orthia, a deep deposit of refuse from the sacrifices was allowed to accumulate about the altar. Altar II is merely a simple rectangle of ashlar construction filled with a core of earth and ashes. It has no prothesis or steps. The only ornamental element was possibly a rectangular barrier at either end with foliate ornament in relief, of which fragments were found. At the center there may have been a level space for the fire. The form of the altars shows that here Demeter Malophoros was worshipped as a chthonic deity, as she was at Eleusis. The traces of fire near the end of the altar indicate that very large fires were built, as would be necessary for chthonic sacrifices.

7. Kerkyra, Temple of Artemis (Gorgo). To the east of the sixth-century temple of Artemis (the so-called temple of Gorgo) at Kerkyra are the remains of a low ceremonial altar consisting of triglyphs enclosing a rubble core. On the transverse wall two triglyphs at each corner and one in between them are preserved. On the east longitudinal wall seven or eight triglyphs are preserved, and on the west, nine. The triglyphs are on a simple plinth base and well formed, and the metopes are plain squares. Since the altar is parallel with the temple and connected with it by a paved court, the altar is contemporary with the temple, which dates in the second half of the sixth century, and it may be presumed to be symmetrical on the longitudinal axis of the temple, in which case its original length would be double its preserved length of *ca.* 14 m. Since Artemis has strong chthonic elements, and since this type of altar is particularly appropriate to a chthonic divinity, the conclusion is that here Artemis was worshipped as a chthonic divinity.—Rodenwaldt, *Korkyra*, I, Schleif, Rhomaïos, and Klaffenbach, *Der ArtemistempeI*, pp. 63-66, figs. 48-51, pls. 13-17. Fig. 70. Wilhelm II, *Erinnerungen an Korfu*, pp. 88-90, figs. 14-16, map 3; Dörpfeld, *Arch. Anz.*, XXVII, 1912, col. 247; cf. *ibid.*, XXIX, 1914, cols. 46 f.; Johnson, "The Kardaki Temple", *A.J.A.*, XL, 1936, pp. 46-54; Dinsmoor, "Additional Note on the Temple at Kardaki", *ibid.*, pp. 55 f.

48. Stepped Monumental Altars.²⁷ Stepped monumental altars consist of two elements separated vertically: a broad staircase of about

²⁷ R. Hallo, *Monumentaltäre des Altertums* (Dissertation Göttingen, 1922; 142 pp.) is known to me only from the summaries: *Jahrb. Philos. Fak.* (Götting. Univ.), 1923, pp. 73 f. = *Arch. Anz.*, XXXVII, 1922, cols. 362 f.

four to seven steps leading to a platform (the *prothesis*), which is formed by the extension of the top step and is as long as the width of the staircase; and a cubical structure similar to a low monumental altar but much higher, which extends along the full length of the rear of the platform and reaches about breast-high to the officiating priest standing on the platform. The first element includes the stairway and the *prothesis*, and corresponds to the *prothesis* of ceremonial altars; the second element is the body of the altar, and corresponds to the body of ceremonial altars. Since the body of the altar was higher than the rest of the altar, the walls of the body extended on all four sides down to the ground, and special foundations were needed for it. Structurally the two elements are normally distinct from the foundation up, the division in stepped monumental altars being vertical, whereas in ceremonial altars the division is horizontal. The typical plan of the foundation of a stepped monumental altar has the easily recognizable form of a rectangle, with a line dividing it longitudinally into two parts. The staircase is normally on the long side. At least seven examples from this period have *antae* flanking the staircase. In the following period this feature became more usual. This type includes all the largest altars; their length often equals or exceeds the width of the temple to which they appertain.

Stepped monumental altars first appeared in the first half of the eighth century. Thereafter they remained throughout the Hellenic era the most popular type of altar before temples. All but two (Nos. 8, 9 at Olympia) of the 22 pre-Classical stepped monumental altars are situated before temples; all but four of the 20 later altars (§ 71, Nos. 8, 9, 11, 19) are likewise situated before temples. Normally stepped monumental altars are situated approximately before the east entrance of the temple, and in view of the cult statue (but cf. Nos. 13, 17). The distance of the altar from the temple usually equals or exceeds the width of the temple. With one exception (at Aigina, No. 20), the front of the altar, that is, the stairway, is on the west side of the altar, the side near the temple, so that in performing the sacrifice the priest faced the same way as the cult statue, and had his back to the temple. Since the worshipping throng was usually between the temple and the altar (and most probably faced the altar during the sacrifice), the officiating priest had his back turned to the worshippers during the act

of sacrifice, but during the ceremony probably turned from time to time to face the cult statue and the worshippers. In two cases the worshippers must have stood beyond the altar, facing the temple, for the altar is, in one case, only 2.30 m. from the stylobate of the temple, and, in the second case, the altar touches the krepis (Cyrene and Selinus, Nos. 10 and 13). Vitruvius, IV, ix, sanctions this arrangement.

Of the 22 pre-Classical examples known, the plan of all but two is fairly clear. The two earliest examples (Nos. 1, 2, Altars III, IV at the Samian Heraion) measure less than 5 m. in length, but thereafter the length increased, reaching a maximum of 38.70 m. (No. 6, altar VIII at the Samian Heraion) at the end of this period. The average length is about 15.3 m., and the average width is about 6.4 m.; these measurements yield a ratio of average length to width about 2.4:1. In the individual altars the ratio varies from 1.2:1 (Samos, altar III, No. 1) to 4.4:1 (Cyrene, temple of Apollo, No. 10). If the two earliest altars, which seem to be transitional types from ceremonial altars, are disregarded, as well as the largest altar (No. 6), because of its great variation from the next largest (No. 18), the typical dimensions of stepped ceremonial altars in this period may be said to be 5.40 m. to 29.50 m. length and 2.20 m. to 13.80 m. width; this basis yields an average of 14.5 m. length and 6.2 m. width, and a ratio of length to width about 2.4:1. These figures are nearly or exactly the same as those given above.

By the seventh century the monumental altar appears as a distinct type, well defined, and widely spread. The examples here examined date from the eighth to the early fifth centuries, and show characteristics which persist in the following period as well. This is the most frequent type of altar before large temples, both in the pre-Classical period and later, for it is the type of altar most suitable for brilliant ceremonies, as well as the most beautiful in itself and architecturally harmonious with the temple.

Since stepped monumental altars are very expensive to build, it is not surprising to find that the spread of the type follows the shift of the centers of prosperity. The earliest examples occur in the eighth and seventh centuries in Ionia; two examples occur in Cyrene in the sixth century; in the sixth century and thereafter they are frequent in Magna

Graecia; and finally toward the end of the archaic period the type occurs in Grece proper.

The general form and appearance of the stepped monumental altars of the pre-Classical period²⁸ is quite clear. They are built with ashlar walls, about a rubble or ashlar core. The staircase extends across the entire length of the west side of the altars, and is frequently flanked by antae, in which case the width of the staircase is slightly less than the total length of the altar. The antae do not extend beyond the lowest step and are generally reconstructed as not exceeding in height the level of the prothesis. In plan the staircase usually occupies a little more than a third of the total width of the altar, the prothesis occupies a little less than a third of the total width, and the body of the altar about a third. Some form of balustrade probably existed at each end of the prothesis. The body of the altar was topped at each end by a barrier, for this feature is found in contemporary low monumental altars, and in stepped monumental altars of the following periods. The same considerations indicate that the top of the body came up about to the breast of the officiating priest, when he stood at the prothesis. The sacrificial fire was lit on top of the body of the altar. The purpose of the barrier originally was to retain the ashes on smaller altars (§§ 52, 61 B), but on monumental altars it was entirely ornamental.

1-6. Samos, Heraion. (For altars I and II, see § 46, Nos. 1, 2, where references for the later ones also.) Altars III to VII had on the west side projecting antae flanking a staircase. Two to three steps of each staircase are extant. Altar III, dating in the first half of the eighth century and measuring *ca.* 4 m. by 3.40 m., is grounded at level 121 (i.e., 121 cm. above the datum line), and is preserved to a height of 0.40 m. to 0.59 m. Its construction is isodomic, though not ashlar.²⁹ Altars IV and V date in the second half of the eighth century. Altar IV measures 4.90 m. by 3.90 m., is grounded at level 123-157 and is preserved to level 172. Altar V measures 11.50 m. by 4.40 m., is grounded at level 158-177 and is preserved to level 220. The construction of this altar, as of altars VI and VII, is isodomic. Altar VI is of the early seventh century. It is *ca.* 13 m. by 6 m. in plan, is grounded in level

²⁸ A brief general summary of the sculptural decoration of altars in the archaic period will be found in Picard, *Manuel d'archéologie grecque, La sculpture, I, Période archaïque*, pp. 409-415.

²⁹ Scranton, *Greek Walls*, p. 18.

148, and is preserved to level 187-214. The walls of altar VII are built over the walls of altar VI, and the walls of this reconstruction reach level 205-245. This altar dates in the latter part of the seventh century. Fig. 67.

Altars II to VII are properly located, east of the temples which were built successively above each other to the west of the altars. But they do not face exactly toward the temples, being oriented 30° south of east. Hekatompedos I faced altars II, III, IV, V (at a distance of *ca.* 16, 12, and 10 m., respectively), and Hekatompedos II faced altars VI and VII (at a distance of *ca.* 9 m.). In front of altars VI and VII there was a large paved platform *ca.* 8 m. wide, and as long as the altar. Paths packed with pebbles led from altars II, III, IV.

Altar VIII was built in the middle of the sixth century, at the same time as the temple built by Rhoikos, and presumably by the same architect.³⁰ It is of impressive proportions, 38.70 m. by 19.25 m., with a staircase across the front between flanking antae and a prothesis before the body of the altar. This is the largest pre-Classical stepped monumental altar. The remains of the older altars lie under the staircase, but this altar is oriented differently, being turned directly west, in order to face the temple. It is constructed of poros ashlar and is parallel to the front of the temple, but is slightly asymmetrical in regard to the axis of the temple. A rebuilding, altar IX with ornamentation of marble, took place in the early Roman period.

The upper part of altars I-VII cannot be reconstructed, but enough has been recovered from altars VIII and IX to make their plan clear. In Schleif's reconstruction, the staircase has 14 steps, the prothesis is only slightly wider than the other steps; the body of the altar is *ca.* 1.25 m. higher than the staircase and *ca.* 7.20 m. wide; a balustrade 2.50 m. wide and 2.10 m. high surmounts the body of the altar on three sides and extends forward on the lateral sides to form antae flanking the staircase; the total is 7 m. high.

The innovation of the staircase on altar III (ceremonial altars, which appeared earlier, lacked a staircase) arose from the desire to make the altar, which was the center of great solemn ceremonies, as impressive as possible. The inspiration was evidently drawn from the large rock-cut altars in the mountains of the interior of Asia Minor. The date of individual rock-cut altars is difficult to determine, but they generally date early in the first millennium.³¹ They usually have a broad staircase consisting of three or four steps, which leads to a raised ledge with a

³⁰ Schleif, *Ath. Mitt.*, LVIII, 1933, pp. 174-210, suppl. pls. LIV-LVII, discusses altars VIII and IX and their ornamentation.

³¹ Cf. § 86 for rock-cut altars.

vertical back, which represents the throne of the divinity. Altars III, IV, and V, are all earlier than any other altars with a staircase in antis.

7-9. Olympia. The Altis at Olympia was inhabited early in the second millennium, and apsidal houses from that period have been found. Pausanias records many traditions about the founding of various altars from the middle of the second millennium to the early part of the first.³² While many of the extant altars may have been founded originally at a very early date, physical remains dating before the Classical period are extant of only three altars, all stepped monumental. (See also § 69, No. 13.)

Heraion. Parts of the foundations from two adjacent rectangles, evidently an altar, are extant 15 m. east of the Heraion.³³ The rectangle to the east carried the walls of the body of the altar, and is slightly larger, while the one to the west, which carried the prothesis and steps, is slightly narrower and shorter. The overall dimensions are 5.90 m. by 3.80 m. Some of the blocks are from Heraion I according to Dörpfeld,³⁴ and therefore the altar belongs to Heraion II, which is placed in the ninth century by Dörpfeld,³⁵ but which is probably two centuries later. In any case, the stratigraphy points to an early date.³⁶

This altar probably had only two or three steps, and this resemblance to ceremonial altars speaks for an early date. The stairway may not have extended quite the entire length of the body of the altar. An altar of Hera near the Heraion is mentioned by Pausanias, V, xiv, 8, but as being of ashes. From this evidence Schleif³⁷ has reconstructed this altar with a large ash heap behind and against the body of the altar and reaching over the body of the altar. It is probable that after the original

³² See Dörpfeld, *Alt-Olympia*, pp. 28-72; Gardiner, *Olympia*, pp. 193-203 *et passim*.

³³ *Olympia, Ergebnisse*, Text Vol. II, 1892, p. 163; Plates Vol. II, pl. XCV, 1; Gardiner, *Olympia*, pp. 195 f.; Weniger, *Klio*, XIV, 1914, p. 416, considers this an altar of Apollo and Hermes; Dörpfeld, *Alt-Olympia*, pp. 186 f., pl. 4.

³⁴ *Ibid.*, p. 186, fig. 49 (marked F).

³⁵ *Ibid.*, pp. 24, 70. H. Searls and Dinsmoor, "The Date of the Olympia Heraeum", *A.J.A.*, XLIX, 1945, pp. 62-80, assign Heraion A to the late eighth century, and Heraion B (the latest one) to the early sixth century. These dates are rather the lowest probable.

³⁶ A. Boetticher, *Olympia*, fig. 38 p. 196.

³⁷ *Jb. Arch. I.*, XLIX, 1934, fig. 6 p. 147; fig. 1 p. 141; p. 146.

stone altar fell into disrepair, an ashen altar was allowed to form above the remains of the original altar, since the spot was endowed with the sanctity of great antiquity, and that the lower courses were partly or entirely obscured. Pausanias says that the ashen altar of Hera was founded by Klymenos, son of Kardys, 50 years after the flood of Deukalion, which according to the *Marmor Parium*³⁸ took place in 1528 B.C. In view of the location of the altar, and the fact that it is the oldest altar in the Altis at Olympia, it is natural to identify this as the altar of Hera mentioned by Pausanias.

Upper Terrace. Between the treasuries of Selinus and Cyrene, there are superimposed remains of two rectangular foundations, evidently of altars.³⁹ The lower one, altar I, slightly to the east, is of marly limestone, and assigned to the seventh or eighth century by Dörpfeld, but this is probably too early. At any rate, this material was used only in the earlier structures before the end of the sixth century at the latest. Altar II is probably of the sixth century. Dörpfeld identifies this altar with the altar of Rhea mentioned by Pausanias, while Gardiner identifies it with the altar of Ge.⁴⁰ Both altars were 5.40 m. long east-west, and probably almost as wide, but the southern side on which the steps extended is not preserved.

10. Cyrene, Temple of Apollo. The primitive altar of Apollo was built of tufa near the turn of the seventh to the sixth century (22.08 m. by 5 m.), probably with antae flanking the staircase. In the middle of the fourth century it was rebuilt of marble. See § 71, No. 7.

11. Cyrene, Temple of Artemis. The temple of Artemis, except for the Roman porch, and the altar of Artemis belong to the sixth century. The altar is *ca.* 13 m. by 5 m. in plan, and is 36.50 m. from the temple, parallel to it and symmetrical to its axis. The temple is 7 m. wide, and is immediately north of the temple of Apollo. The altar had a staircase across the front flanked by antae.—Pernier, *Africa Italiana*, V, p. 69; pls. I, III (plan); *ibid.*, IV, pp. 224 ff., fig. 44.

12. Akragas, Sanctuary of Demeter and Kore (cf. § 35, Nos. 2-5). To the east of the two partly superimposed temples (north-east of the so-

³⁸ Jacoby, *Das Marmor Parium*, pp. 3 f.

³⁹ *Olympia, Ergebnisse*, Text Vol. I, p. 75; Dörpfeld, *Alt-Olympia*, pp. 67 f.; Gardiner, *Olympia*, pp. 196, 221, figs. 49, 60.

⁴⁰ Dörpfeld, *Alt-Olympia*, *ibid.*; Gardiner, *Olympia*, p. 196.

called temple of the Dioscourai), a single course of compactly laid ashlars forms a rectangle 13.50 m. by 4.53 m. (probably early sixth century). This is the lowest course of altar 15. On the west side there is a recessed step *ca.* 0.30 m. high and wide. Altar 15 almost touches the later (southern) of the two temples, and probably pertains to it, although this temple's orientation diverges slightly from that of the altar. A row of ashlars almost along the transverse axis does not indicate a structural division.—Marconi, *Agrigento arcaica*, p. 37, plan fig. 56 p. 87; cf. plan fig. 5 p. 19. Fig. 25.

13. Selinus, Temple D. The altar of temple D is 18.20 m. long and 7.40 m. wide. The middle of the altar is approximately opposite the south-east corner of the krepis, where the altar touches the temple. Between the altar and the front of the krepis was an angle of 7° . Preserved of the altar is most of the lowest course around all four sides (the core was not of stone); along most of the west side the steps up to the third course; and on the north side a fourth course. The method of binding between the altar and the krepis shows that the altar is older than temple D, which was built *ca.* 560. This explains the divergence of orientation of the two structures. The width of the stylobate is *ca.* 23.70 m.—Hulot and Fougères, *Sélinonte*, pp. 237 f., reconstructed plan p. 232; Koldewey and Puchstein, *Griechische Tempel*, I, pp. 107, 110; II, pl. 13.

Near the altar, Cavallari found 40 wine jars buried in alignment, which contained ashes, bones, and potsherds; this is obviously sacred refuse from the accumulation of votive offerings and from the sacrifices.⁴¹ A similar method of disposal was used at Thermos,⁴² and at the sanctuary of Zeus Aktaios on Mt. Pelion, where six amphorae were found filled with ashes.⁴³

14. Selinus, Temple C. Temple C at Selinus was built between 580 and 570, and is 23 m. wide at the stylobate. About 50 m. to the east of it there are extant two ashlar courses of a wall 10 m. long parallel to the façade of the temple. This may be the remains of the altar of temple C. It is possible that this altar is a late construction, built after temple B in the middle of the third century was interposed between temple C and the altar southeast of temple B, and in that case it does not belong to the period under consideration.—Hulot and Fougères, *Sélinonte*, p. 213, note 2; cf. plans following p. 168.

⁴¹ *Bull. Sic.*, VI, 1874, pl. III (quoted by Koldewey and Puchstein, *Griechische Tempel*, I, p. 110).

⁴² Sotiriades, *Arch. Eph.*, 1900, cols. 176-179.

⁴³ Arvanitopoulos, *Praktika*, 1911, p. 310; cf. *A.J.A.*, XVII, 1913, p. 109, and Cook, *Zeus*, II 2, p. 870.

15. Paestum, Archaic Enneastylos. The altar of the archaic Enneastylos, the so-called Basilica, at Paestum is 9.10 m. from the east side of the krepis, oriented parallel to it. In plan it is 21.20 m. long and 6.26 m. wide, and is extant to a height of three or four courses. It has been restored with a staircase of five steps across the east side flanked by antae with the prothesis 1.50 m. wide and the body of the altar 3.30 m. wide. The altar is contemporary with the temple which was built between 570 and 554. The width of the stylobate is 24.525 m., or slightly more than the length of the altar.—Koldewey and Puchstein, *Griechische Tempel*, I, p. 13; fig. 15 p. 17.

16. Paestum, Archaic Hexastylos. The altar of the archaic hexastyle temple at Paestum, the so-called temple of Ceres (probably early sixth century), has not been excavated fully. The foundations of the body of the altar are extant, but not of the prothesis and staircase. The complete altar probably measured in plan 15.10 m. by 3.15 m., that is, its length was 0.60 m. less than the width of the temple, from which it was 29.80 m. distant.—Koldewey and Puchstein, *Griechische Tempel*, I, pp. 18 f.; plan fig. 23 p. 23.

17. Lucania, Temple of Hera Argeia. The earlier temple of Hera Argeia on the Silaris river in Lucania dates from the sixth century, perhaps early. The altar is *ca.* 13 m. to the northeast of the temple (which faces east), measures 6.95 m. by 2.15 m., and is *ca.* 17° differently oriented from the temple. Extant are only the blocks which form a rectangular foundation, probably of the body of a stepped monumental altar.—P. Zancani Montuoro and Zanotti-Bianco, *Notizie d. Scavi*, Ser. 6, XIII, 1937, pp. 263-283, plan fig. 52; cf. map fig. 2 p. 215, plan fig. 4 following p. 218, pl. X; P. Zancani and Zanotti-Bianco, *A.J.A.*, XL, 1936, pp. 185-187.

Southwest of the later temple (of the end of the sixth century) was a pit 0.90 m. by 1.00 m. in plan and 3.50 m. deep, which contained remains of sacrifices: bones of animals, carbonized wood, and "ritual implements". The pit was used for the burning of the victims from Hellenistic times to imperial times. (Cf. *J.H.S.*, LVI, fig. 14 p. 230.)

18. Akragas, Temple of Herakles. The altar of the so-called Temple of Herakles at Akragas was probably *ca.* 29.5 m. long and 10.57 m. wide. It is 45.26 m. from the stylobate, which is 25.34 m. wide. The altar is contemporary with the temple, which was built between 540 and 480, for the 1° difference in orientation between the temple and the altar is probably due to carelessness and not to a difference in building dates. Extant *in situ* are

only some 25 ashlar, which, with cuttings in the rock on which the altar was founded, show the position of the first step. The form of the base molding can be determined from one block extant *in situ*. Neither the north nor the south end of the altar is extant; the minimum length is determined by adding one more block to the southern end (for the last one preserved is not the corner block), and then assuming that the altar was bisected by the extension of the longitudinal axis of the temple. Among the remains many half-burnt bones were found.—Koldewey and Puchstein, *Griechische Tempel*, I, p. 152.

19. Syracuse, Temple of Athena at Ortygia. The altar which belongs to the late sixth-century temple of Athena on the island of Ortygia is not the hollow ceremonial altar (see below, § 50, No. 3), but the monumental altar 17.50 m. east of the temple.⁴⁴ Its center was approximately on the extension of the south wall of the temple, and it was *ca.* 10° differently oriented from it. The south end could not be excavated. Extant are the base courses in ashlar of the north, east, and west walls, and of the foundations of the wall which carried the east wall of the body of the altar or of the top step. The dimensions were 5.15 m. width and over 9.00 m. length. Near the altar, fragments of a triglyph frieze and of a slab with a scroll and palmette ornament in relief were found.⁴⁵ East of the altar a large deposit of ashes was found mixed with small coals and minute particles of burnt bones.⁴⁶

Orsi reconstructs the altar with stairs across the front, the frieze running about the body of the altar, and the slab placed as a barrier upright above the end of the body, but with no prothesis. A prothesis, however, must have existed, in which case the staircase would have had a smaller number of steps.

20. Aigina, Temple of Aphaia. To the east of the temple of Aphaia in Aigina there are remains of three successive altars partly over one another.⁴⁷ Of the earliest altar, which belongs to the first building period of the temple, namely, to the second half of the seventh century, only the foundations are extant, under the ramp of the latest altar. They measure

⁴⁴ For references, see § 50, No. 3.

⁴⁵ Orsi, *Mon. Ant.*, XXV, 1918, fig. 253, cols. 693/4, pl. XXIII (colored).

⁴⁶ Orsi, *loc. cit.*, cols. 436 f., fig. 47 cols. 437/8.

⁴⁷ A. Furtwängler, *Aegina*, I, pp. 69-75 (altar III); 154 f. (altars I, II); 480-489 (altars I, II, III); suppl., pl. 5 facing p. 154; II, pls. 2, 18.1 and 3; 28.3 (altar I); pls. 2, 18.1, 28.1 (altar II); pls. 4.1, 5.1, 8.2, 27.1, 28.3 (altar III); plans are also given by Welter, *Aigina*, pp. 65, 70 f.

ca. 1.20 m. by 4.50 m. in plan, and are built of flat slabs which have been squared only on the face of the wall. This altar was probably a ceremonial altar. In the next building period, the middle or the latter part of the sixth century, another altar was constructed, of which it can only be said that it was 4.30 m. long, for only five ashlar foundations are extant. This altar also was probably a ceremonial altar.

In the third building period, which took place about 490, a monumental altar 28.50 m. long and 13.80 m. wide was constructed 22.50 m. east of the temple and parallel to its façade. Between the altar and the temple there was a paved way 3 m. wide, which near the temple inclined upward to form a ramp. Only parts of the ashlar foundations are extant.

The remains are not described fully in the excavator's report. If his reconstruction is correct, the steps were on the east side, away from the temple, and the body of the altar longer than the width of the staircase. This altar would then be unique among pre-Classical stepped monumental altars in having a staircase considerably narrower than the body of the altar, and in having the staircase on the side away from the temple. The ramp leading to the temple occurs also at the seventh-century temple of Pamisos in Messenia (§ 46, No. 4).

21. Delphi, Temple of Apollo, The Chian Altar. On the left side of the sacred way as one ascends, in front of the temple of Apollo, is an altar 8.50 m. long and 2.20 m. wide. The altar is *ca.* 15 m. from the krepis of the temple, slightly asymmetrical, and slightly off the proper orientation. Its construction is isodomic. The cornice and base are of white marble, and the dado of black limestone. Besides parts of the lower courses, which are preserved *in situ*, enough building blocks are identified as belonging to the altar, to make the reconstruction certain. It was built on a base or krepis which had three steps on the south side, but none on the north. Between the upper molded course (0.26 m. high) and the base, the dado was 5.59 m. high plus one course of undetermined height. The east side of the altar has been partly rebuilt and partly restored to its original height.—*Fouilles de Delphes*, II 1-3, Courby, *La Terrasse du Temple*, Chapter III, "L'autel de Chios", pp. 119-137; Poulsen, *Delphi*, pp. 203-205; Bourguet, *Les Ruines de Delphes*, pp. 175-178; fig. 50 p. 159. (Under the altar numerous Mycenaean sherds and terracottas were found in layers consisting of rich black earth mixed with ashes closely packed with bits of burnt bones; Poulsen, *Delphi*, p. 59.) For the restoration, see Replat, "Note sur la restauration partielle de l'autel de Chios à Delphes", *B.C.H.*, XLIV, 1920, pp. 328-353.

Two inscriptions on the dado identify this as the altar of the Chians dedicated to Apollo in return for an oracle.⁴⁸ The lettering of the inscriptions places them in the first half of the fifth century. The occasion may have been either between 500 and 494, after the tyrants installed by the Persians were driven out, or after the battle at Mykale in 479. The Chian altar is mentioned by Herodotus, II, 135, and by Pausanias, X, xiv, 7, the latter calling it "the great altar of the Chians". Slaves were liberated at this altar, under the formality of being dedicated to Apollo.⁴⁹

22. Athens, Acropolis, Temple of Athena. East of the Peisistratid temple of Athena, on its longitudinal axis and only 2-3° differently oriented from the temple, there are cuttings in the rock of a structure *ca.* 15 m. by 6 m.⁵⁰ This is clearly where the archaic altar of Athena was placed. It would naturally be retained in use after the Parthenon was built, and probably it was rebuilt or enlarged at that time.⁵¹ An attempt has been made to attribute certain sculptures in the Acropolis Museum to this later phase of the altar, but that is quite conjectural.⁵² The form of the altar was almost certainly that of a monumental altar with a stairway in *antis*.⁵³ This altar is generally called "the great altar of Athena" or simply "the altar on the Acropolis".⁵⁴

[23.] Attica, Cape Zoster, Temple of Apollo. For a ceremonial altar with some elements of stepped monumental altars, see § 46, No. 19.

⁴⁸ Dittenberger, *Sylloge*,³ No. 19.

⁴⁹ See Frazer, *Pausanias's Description of Greece*, V, p. 310.

⁵⁰ Picard, *L'Acropole, Le plateau supérieur*, p. 52; Judeich, *Topographie von Athen*,² pp. 269 f., where the dimensions of the cuttings are given as 11 m. by 5 m.; Dinsmoor, *A.J.A.*, LI, 1947, plans figs. 3, 4 (pp. 122, 131), cf. p. 140.

⁵¹ Cavvadias and Kawerau, *Akropolis*, pp. 91 f., pl. 4, place the altar of Athena to the northeast of the Parthenon where there is a rectangular cutting in the rock 26 m. by 15 m. This, however, is less suitable: its width is disproportionately large to belong to an altar, for an altar of this length would have been narrower. Besides, if it belonged to the Hecatompedon, it is too far from it; if it was new, its location is too far from the front of the Parthenon.

⁵² Moebius, *Ath. Mitt.*, LII, 1927, pp. 181-189, suppl. pls. XXI, XXII.

⁵³ Moebius, *loc. cit.*, fig. 7 p. 187, gives such a plan.

⁵⁴ *I.G.*, II,² No. 334, lines 19, 29, of 335/4 B.C.; Thucydides, I, 126, 10.

[24.] Selinus, Temple B. Altar may belong to this period or the Classical period. See § 71, No. 17.

49. Monolithoid Altars. This type consists of masoned altars resembling in form and size monolithic altars, especially when stuccoed and painted. Outside of Cyprus, only one example occurs before the Hellenistic period (No. 1) and few later examples. (See also §§ 52, 62.) Monolithoid altars are distinguished from monolithic altars because of the differences in construction, geographical and chronological spread, and lines of origin. Both types are suitable for smaller gatherings.

Excepting the eighth-century altar at Vroulia (§ 34, No. 6), no monolithic or monolithoid altars have been reported outside of Cyprus earlier than the sixth century, and the earliest extant altars in houses are of still later date.⁵⁵ On the other hand, it is impossible to believe that monolithic altars were quite so late in appearing as the earliest extant examples would indicate. For the sixth-century monolithic altars appear fully developed structurally, with two types distinguished (cylindrical and rectangular, the latter subdivided further), so that a previous history is clearly implied. Monolithic altars, therefore, must have appeared about the same time as monolithoid altars, that is, in the eighth century or at the latest in the seventh century. This development is quite different from the one which took place in Cyprus, where monolithoid and monolithic altars were the earliest altars, and even in Classical times the usual altar was a simple crude rubble monolithoid altar. The monolithic and monolithoid altars of the Aegean sphere could easily have evolved directly from the ceremonial altars of the Aegean sphere, but there is also some possibility that they were inspired by Cyprian types, for the presumed date of the earliest monolithoid and monolithic altars in the Aegean sphere corresponds with the period of greatest Cyprian penetration in Greece proper.

1. Vroulia, country shrine, eighth century. See § 34, No. 6.

2-7. Cyprus. See Chapter II, Part C.

⁵⁵ There are references in Homer to altars of Zeus Herkeios in the court of the house, but this refers to the homes of kings; cf. Reisch, P.-W., I, cols. 1647 f. (*s.v.* Altar); Harald Sjövall, *Zeus im altgriechischen Hauskult*, Chapter I, "Zeus Herkeios", pp. 7-48.

Vase Painting

8. Boston. A vase painting by Nikosthenes (*ca.* 520-510) on a kantharos depicts a libation over an altar with flames. The altar is about waist-high to the persons and is composed of four blocks in elevation. The volutes extend beyond the shaft and are formed by an outward and downward extension of the upper molding.—Pfuhl, *Malerei und Zeichnung der Griechen*, I, p. 416, where further references; III, pl. 91, No. 320; a similar volute is seen on an archaic stele, Svoronos, *Das attener Nationalmuseum*, pl. XXVI 1.

50. Hollow Ceremonial Altars. Hollow ceremonial altars are masoned and resemble ordinary ceremonial altars, but they have no prothesis, and the fire is not lit on the top of the altars, but in a rather deep depression on the top, which may be deep enough to extend down to the level of the ground. The altars of this class are chthonic, and some are very low structures. They are closely related to well altars (§ 35). One example (No. 1) is located in the cella.

The examples vary in size from 1.33 m. square (No. 3) to 3 m. square (No. 4), all four of the pre-Classical examples being square. No example is certainly before the sixth century. No. 5 below is to the west of the temple, instead of to the east, No. 1 is in the interior, and No. 2 is to the south. The average dimensions in plan are 2 m. by 2 m.

1. Locri Epizephyrii, South Italy, Early Ionic Temple. Near the southwest corner of the cella of the early sixth-century ionic temple at Locri, four upright slabs (of which one is now missing) formed a rectangle about 1.55 m. square. This structure was evidently a chthonic hollow ceremonial altar, and may have been used even in the later temple (which had a different orientation), since it was in the very center of the cella of the later temple. The location inside of the cella was, of course, very unusual. Perhaps the altar received libations of the blood of the victims, rather than burnt flesh sacrifices.—Koldewey and Puchstein, *Griechische Tempel*, I, pp. 2 f., 7, fig. 2; II, pl. I.

2. Akragas, Sanctuary of Demeter and Kore (cf. § 35, Nos. 2-5). Altar 7 is outside precinct 2, almost against the center of the south longitudinal wall. A single course is extant, of irregular ashlar blocks forming a square *ca.* 2.22 m. in plan, with an irregular opening in the center. Markings on the upper surface show a circular course was placed over this foundation, *ca.* 1.90 m. maximum diameter. This altar is of mixed form, halfway between

hollow ceremonial and a well altar.—Marconi, *Agrigento arcaica*, p. 34, plan fig. 7 p. 25, pl. III a; cf. plan fig. 5 p. 19. Fig. 27.

3. Syracuse, Temple of Athena at Ortygia. The late sixth-century temple of Athena on the island of Ortygia at Syracuse lies immediately to the north of the fifth-century temple. At a distance of 2.20 m. from the krepis of the sixth-century temple and in a slightly different orientation was a low hollow altar, actually consisting of two altars: a foundation, altar I; and four upright slabs which form altar II, resting on altar I. The foundation, grounded in a seventh-century stratum, was 1.33 m. square, and was formed by 18 rectangular limestones placed in one course so that the upper surface is level, but not the under surface. Their size varies from 0.08 m. to 1.03 m. maximum dimension in plan. In the middle is a block 0.53 m. by 0.55 m., which the excavator believes was the original eighth-century altar which was enlarged in the seventh century by the addition of the other blocks of the foundation. This "foundation" is a chthonic ground altar (§ 51).—Orsi, *Mon. Ant.*, XXV, 1918, cols. 353-754; for the ground altar and the low triglyph altar, see cols. 391-404, 688-690; it is marked C on plans pls. I, II; pl. IV; for the monumental altar, see cols. 707-715, fig. 261; marked D on pls. I, II; for the ash deposit, see cols. 436 f., fig. 47. Figs. 71, 72.

Since the fifth-century stratum is higher than the foundation, the slabs must have been added before the close of that period. Altar II is, therefore, contemporary with the building of the archaic temple in the late sixth century, or even earlier. The two slabs on the long sides, the east and west sides, extend the entire length of the altar. They are 1.45 m. long, 0.34 m. wide, 0.61 m. high, and are re-used from a doric frieze, each slab having one half of a triglyph at each end (a full glyph and a half) on either side of an elongated plain metope. On the other sides two plain shorter slabs were used. When discovered, the altar had a thin layer of ashes in the bottom, with small burnt bones in it, above which was some sterile earth filling, over which in turn was another layer of ashes and coals, and on top of this small burnt bones. These strata reached the top of the altar. In the late sixth century the altar was visible only 0.30-0.40 m. above the ground, and it barely extended above the ground in Classical times.

That the foundation belongs to two periods is not probable. Stratigraphical considerations may indeed permit this conclusion, but the inherent probabilities are against it. Since at least one outer block of the foundation appears to have the same kind of architectural markings

as the center block, it is probable that these blocks are all re-used blocks from the same building, and contemporary. The entire foundation, therefore, dates in the eighth century.

This altar was retained in use as a sacred and time-hallowed relic of the founding of Syracuse. In both stages it was clearly chthonic in form. Since Athena is not a chthonic divinity, and since the later monumental altar of the temple of Athena was not chthonic, the triglyph altar and its predecessor could not have belonged to Athena, as the excavator believes. Besides, the retention of an older altar after a new altar had been built to the same deity is without parallel elsewhere. This altar, therefore, must belong to the hero founder of Syracuse, who may have been buried under it or near it.

4, 5. Akragas, Sanctuary of Demeter and Kore. Altars 13 and 14 may be hollow ceremonial altars. See § 46, Nos. 16, 17.

51. Ground Altars, Sacrificial Pits. One ground altar is known from this period, and two from the following period: all are almost level with the ground, the structure of the altar serving merely as a marker, and as a place where the sacred ashes, accumulating from time to time, would be protected from profanation. These altars are clearly chthonic. It is possible that they derive from some rude antecedents such as the Cyprian offertory slabs (§ 29) or the ceremonial fires at Malthi-Dorion (§ 18), but they are more probably merely a simplification of the hearth altar (§§ 34, 43). The ground altar of this period is the eighth-century foundation of the triglyph altar near the temple of Athena at Syracuse (§ 50, No. 3; Figs. 71, 72). For a fourth-century ground altar, also from Magna Graecia, see § 52, Nos. 6, 7.

Sacrificial pits are natural or artificial depressions in the ground; the former cannot always be distinguished from refuse pits (cf. § 85). The comparatively late appearance of this type, so far as is known at least, lends support to the conclusion that this type is a spontaneous innovation, dictated by religious precepts and the functional demands of chthonic worship. If earlier examples were known, or at least if sacrificial pits were much more frequent, one could argue, on the basis of the primitive aspect, that the type was a third primitive prototype, brought in along with the cubical mound and the hearth (§ 43).

1. Vroulia. See § 34, No. 6.

2. Akragas, Sanctuary of Demeter and Kore (cf. § 35, Nos. 2-5). Altar 5 is outside precinct 1, at its southeast corner. Extant is a single course, which may have been the only course of the altar (2.56 m. by 1.98 m. in plan). It consists of five ashlar blocks with a recessed level above. The blocks were probably partly inbedded in the ground, leaving above the ground only the recessed step, which is *ca.* 0.15 m. wide and 0.20 m. high. A rectangular opening is left in the center (1.30 m. by 0.75 m. in plan). To the west, two superimposed ashlars form a stand level with the altar (1.25 m. by 0.85 m. in plan).—Marconi, *Agrigento arcaica*, pp. 33 f., plan fig. 6 p. 21, pl. II b (partly visible); cf. plan fig. 5 p. 19. Fig. 26.

3. Akragas. A sacrificial pit, cut in the rock, seems to have existed in an early sixth-century small open-air shrine at Akragas. The pit is about 0.85 m. by 0.65 m. in plan and 0.25 m. deep.—Marconi, *Notizie d. Scavi*, VIII, 1932, pp. 407-411, figs. 2 (plan), 3.

4. Akragas, Sanctuary of Demeter and Kore, Precinct 2. Sacrificial or refuse pit in western wing, with ceremonial and well altars. See § 35, Nos. 2-5. Figs. 27, 62.

52. Rectangular Monolithic Altars. These altars are simple cubical blocks, usually of marble, with horizontal moldings above and below. The type was greatly diversified in the Classical and post-Classical period, but in the sixth century, when this type is first found, it already included two sub-types: flat-topped altars, and those with barriers in the form of volutes at the top.⁵⁶ The extant examples are

⁵⁶ Volutes and barriers are discussed by Cook, *Zeus*, I, pp. 510-513, figs. 377-387, where the volutes are derived from the Minoan sacral horns, such as are seen on the smaller shrines (§ 9). Cook uses also the term altar fender. For Sumerian, Akkadian, and Assyrian altars with rectilinear barriers, see Von der Osten, *Ancient Oriental Seals in the Collection of Mr. Edward T. Newell* (Univ. of Chicago Oriental Inst. Public., XXII), pp. 116-118, figs. 22, 153, 398, 403-6. Decorative spiral volutes were known to Mycenaean art: Karo, *Ath. Mitt.*, LV, 1930, pp. 131-133, fig. 4, Beil. XXXIII (spiral volutes on a metal tripod from Tiryns, probably end of the Mycenaean era); Persson, *New Tombs at Dendra near Midea*, pp. 47 f., 129-132, pl. II (metal spiral volutes on a wooden chest); cf. Demargne, *La Crète dédalique*, pp. 150-157. But the use of volutes as structural members may follow Oriental inspiration. This seems to be the case also with volutes on monolithic altars: cf. Galling, *Der Altar in den Kulturen des alten Orients*, pp. 102-105, pls. 10, Nos. 19,

from Magna Graecia. Many monolithic and monolithoid altars probably had a metal fire pan on the top to protect the stone and retain the ashes. This is frequently represented in vase paintings on volute altars. Rectangular and cylindrical monolithic altars have no prothesis, but they are frequently placed on a separate plinth base. The usual height is about 1 m. and the average dimensions in plan are 1.2 m. by 0.9 m.; no altar of monolithic form reached "cyclopean" size. (See also §§ 42, 49, where the origin of the type is discussed.)

1, 2. Selinus, Precinct of Demeter Malophoros. In the sanctuary of Malophoros two altars of nearly equal size and similar form were found, one near the northeast corner of the temple and the other just inside the propylaea.⁵⁷ They probably date in the early sixth century. The former altar is 1.06 m. high, 1.26 m. long, and 0.78 m. wide. It was covered with a fine stucco except at the lower molding, which fact indicates that part was below the surface of the ground. This altar is actually composed of two superimposed stones, the line of division being a little below the upper molding. The top of the altar is provided with two barriers which are formed by the outcurving and upcurving of a horizontal member above the molding. The second altar was quite similar. The moldings of both altars are simple, with ovolo instead of cyma. Fig. 37.

Among the votive objects found in the sanctuary was an arula of terracotta (height 0.095 m.) with a somewhat similar barrier in the form of cylinders and with a rectangular plinth-like member between the volutes.⁵⁸ Fig. 38.

3-5. Selinus, Precinct of Demeter Malophoros. Three more monolithic altars are mentioned, two outside the propylaea, north of it (B and C in the plan), one in a room south of the propylon (H). Traces of burning

20; 12, No. 20; for an Assyrian altar with raised barriers pointing outward and rosettes in the center, but lacking a connecting member (second half of thirteenth century), see A. Götze, *Hethiter, Churriter, und Assyrier* (Oslo, 1936), pl. 55. See also H. Kantor, *A.J.A.*, LI, 1947, pp. 21-32, 56-61. Various types of barriers and volutes are illustrated by Vallois, *B.C.H.*, LVIII, 1934, pp. 429-432, where the metal firepan is also visible in many cases.

⁵⁷ Koldewey and Puchstein, *Griechische Tempel*, I, pp. 84 f.; II, pl. 11; Hulot and Fougères, *Sélinonte*, p. 267, pl. facing p. 268; Gábrici, *Mon. Ant.*, XXXII, 1927, cols. 112-115, figs. 69, 70, pl. XV 2. (A doubtful fragment of another altar is mentioned, cols. 115 f., figs. 71-72.)

⁵⁸ Gábrici, *loc. cit.*, col. 203, fig. 109. (The "altar" mentioned *ibid.*, col. 118, fig. 73, appears to be a stand or base.)

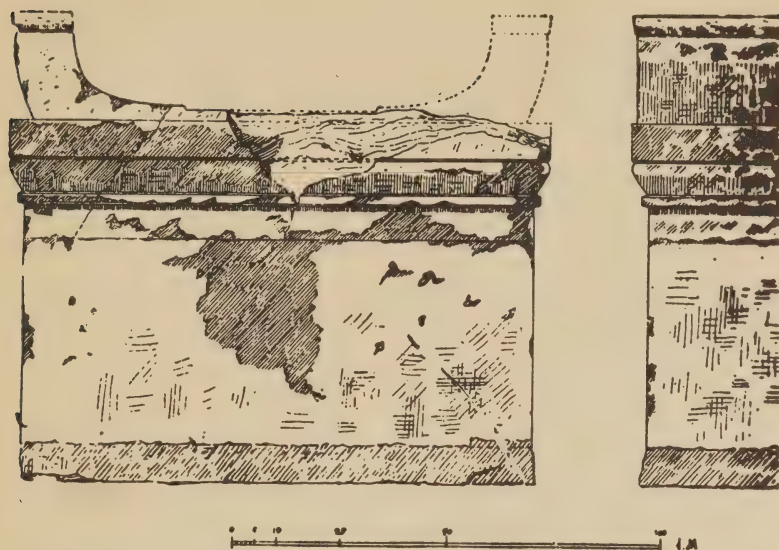


FIG. 37. Selinus, Sanctuary of Demeter Malophoros. Monolithic altar with barriers.
(§ 52, No. 1)

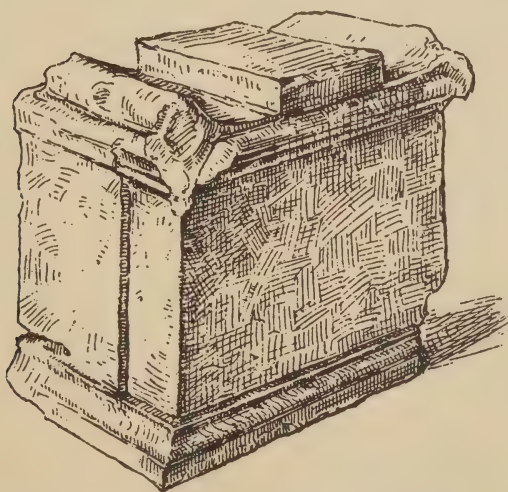


FIG. 38. Selinus, Sanctuary of Demeter Malophoros. Votive terracotta arula.
(§ 54, No. 1)

are mentioned on these altars. Dimensions in plan are, respectively, *ca.* 1.15 m. by 1 m., 1 m. by 0.75 m., 1.60 m. by 1 m., 1.10 m. by 0.50 m.—Koldewey and Puchstein, *Griechische Tempel*, I, p. 84 (where further references); II, plan pl. XI; Hulot and Fougères, *Sélinonte*, pp. 265 f., and illustrations; Gàbrici, *Mon. Ant.*, XXXII, 1927, plans pls. I, II; pl. VIII.

6, 7. Selinus, Precinct of Zeus Meilichios. The precinct of Zeus Meilichios, so identified epigraphically, occupies the northeast corner of the sanctuary of Malophoros (§ 47, Nos. 5, 6), and in it is a small doric temple of the sixth century. Before the east side of the temple, somewhat to the north, are two bases, *ca.* 1.30 m. by 0.90 m. and *ca.* 0.90 m. by 0.60 m. respectively.⁵⁹ Fig. 34.

In the fourth century a double ground altar was placed to the west of the temple at a distance of *ca.* 18.60 m., on the extension of the north wall of the temple.⁶⁰ This double chthonic altar has a singular form: it consists of two slabs laid on the ground next to each other with a third slab placed upright between them as a barrier, and one more at each end as end barriers. The horizontal slabs are unequal in length, the larger one being *ca.* 1.30 m. long, and the shorter one, half that. The total measurements of the altar are 2.56 m. length, 1.22 m. width, and 0.68 m. height. Fig. 49.

The excavation plans show foundations of a structure from the fourth century or later east of the temple of Zeus Meilichios.⁶¹ The remains form a rectangle 3.20 m. north-south by 2.60 m. east-west, which is bisected by another wall running north-south between the two side walls. This structure is a monumental altar with steps across the front, oriented parallel to the front of the temple, and very slightly asymmetrical in regard to its axis.

The two sixth-century bases must have supported altars, since they are the only structures contemporary with the temple suitable for altars, and since two altars can be expected, by analogy from the double ground altar of the fourth century. The great number of votive terracottas representing a male and female deity indicates that a female deity, probably Pasikrateia, was worshipped here with Zeus. This explains the existence of the twin altars, which must have been monolithic. Zeus Meilichios, often represented in the form of a snake, is a chthonic divinity.⁶² It

⁵⁹ Gàbrici, *loc. cit.*, cols. 101 f.

⁶⁰ *Ibid.*, cols. 103-105.

⁶¹ *Ibid.*, plan pl. II; the other late remains are discussed in cols. 107-109.

⁶² Cook, *Zeus*, II 2, pp. 1091-1160; for a summary of this precinct of Zeus Meilichios, see *ibid.*, III 2, p. 1188. For a triple altar, see § 69, No. 18;

is possible that the two sixth-century monolithic altars were used as chthonic altars, but analogy from the fourth century suggests also the possibility that they were used as Olympian altars, while the chthonic sacrifices were performed at a ground altar now lost, or at a simple sacrificial pit. In the fourth century the existence of a stepped monumental altar in addition to the ground altar shows that here Zeus and his consort were worshipped as chthonic deities and also as Olympian deities, probably under a different appellation.

8, 9. Akragas, Sanctuary of Demeter and Kore. (a) In the eastern wing of precinct 1 (cf. § 35, Nos. 2-5), is a rectangular monolithic altar (altar 2). The body of the altar is 0.95 m. square in plan and 0.65 m. high, and is provided with a relatively high base consisting of two ashlar (1.38 m. by 1.33 m. in plan, 0.40 m. high). On the west side a smaller ashlar serves as a platform for the officiating priest. (b) Altar 4 is in the western room of precinct 2. It rests on a raised level of earth (0.15 m. high), and consists of a block of tufa (1.02 m. by 0.96 m. in plan, 0.43 m. high). On its upper surface was an irregular rectangular depression with a maximum dimension in plan of 0.40 m., and a depth of 0.02 to 0.20 m., in which were signs of burning, ashes, and burnt bones of small animals. Next to the altar is a small ashlar stand, approximately as high as the altar.—Marconi, *Agrigento arcaica*: (a) pp. 23 f., plan fig. 6 p. 21, pl. II b, cf. plan fig. 5 p. 16; (b) p. 27, plan fig. 7 p. 25, pl. III b, cf. plan fig. 5 p. 16. Figs. 26, 27, 62.

Vase Paintings. In the vase paintings of the archaic period, monolithic altars with volutes are very common, while other monolithic altars are scarcely encountered. Libations at household altars are a favorite subject of vase paintings from the sixth century on.

10. Paris. On a Chalcidian volute amphora in the Louvre there is an altar in profile, the back of which is higher than the front; the upper surface forms a concave curve, evidently the result of the action of the fire on the stone.—*Recueil Edm. Pottier*, p. 496, No. E 799, fig. 6; Holwerda, *Jb. Arch. I.*, V, 1890, illustration p. 247.

cf. Athenaeus, V, 197 (a double altar in the procession of Ptolemy); Herodotus, VI, 61 (altar of the twelve gods in Athens); also Schlesinger, "Associated Divinities in Greek Temples", *A.J.A.*, XXXV, 1931, pp. 161-169. On multiple altars, see Gardiner, *Olympia*, pp. 198 f., where further references. A triple altar is extant at Pompeii: § 61, No. 89.

11-13. Paris. A red-figured vase painting by Brygos in the beginning of the fifth century shows an altar with volutes which are formed by the member immediately above the upper molding being extended past the molding, with the volute projecting past the shaft of the altar. Above this is another member of uniform thickness extending between the highest points of the volutes, evidently the metal firepan.—Pfuhl, *Malerei und Zeichnung der Griechen*, III, pl. 139, fig. 420; Beazley, *Attic Red-Figure Vase-Painters*, p. 245; the same type of altar is seen in Pfuhl, *op. cit.*, pl. 148, fig. 433 (by the Brygos Painter), and in pl. 155, fig. 447 (by the Eos Master). Fig. 39.



FIG. 39. Vase Painting by Brygos. Representation of monolithic altar with volutes and firepan.

(§ 52, No. 11)

14. Spina. The same type of volute is seen on a red-figured cylix from Spina, except that the volute does not extend beyond the upper molding, and there is no member above it.—Aurigemma, *Il R. Museo di Spina*, p. 134, pl. LXXIII.

15. Berlin. A black-figured hydria in Berlin shows an altar with volutes whose connecting member is almost level between the highest point of the volutes.—Verrall and Harrison, *Mythology and Monuments of Ancient Athens*, p. 428, fig. 37.

53. Cylindrical Monolithic Altars. These altars are comparable in size to rectangular monolithic altars, and were probably considered of equal importance. The earliest known examples of this period are from Asia Minor (cf. § 49).

1. Miletus, Precinct of Apollo Delphinios. This altar, *ca.* 0.82 m. high, was found at a Hellenistic level, but it is obviously preserved from much earlier times. It is badly weathered and part of the top is broken off. The forms of the moldings are of the sixth century or earlier, consisting of a tainia, torus, and astragal for the base; a simple curve is used instead of a cyma. Similar moldings of a somewhat contemporary date have been found at Locri and Naucratis,⁶³ and in Sicily.⁶⁴ The altar carries a boustrophedon dedication of three priests to Hecate. The letters are of the sixth century, which may be somewhat later than the altar. It is improbable that this is only a base of some sort, for in that case it would not have been preserved in its weathered condition into late Hellenistic times.—Kawerau and Rehm, *Milet*, I 3, p. 153 (29), figs. 41, 45a; the inscription is No. 129, pp. 275 f. (151 f.).

2. Miletus, Lion Gate. Another archaic monolithic cylindrical altar was found built into the Lion Gate at Miletus. This altar has a diameter of 0.96 m., and is visible to a height of 0.70 m. Only the upper molding is visible, consisting of a tainia over an egg and dart, which is on a simple curve instead of a cyma. It is built into the Lion Gate, which was constructed between 402 and 334, and it has an inscription of the first century B.C.—Von Gerkan, *Milet*, II 3, pp. 48, 131 (No. 400), fig. 22 p. 45; fig. 28 p. 50; fig. 29 p. 51. Fig. 38.

3, 4. Olympia, Altar of Herakles. Two doubtful crude round cylindrical monolithic altars under and in the foundation of the altar of Herakles are mentioned in § 69, No. 13.

54. Arulae (cf. § 65).

1. Selinus. One example from this period was a votive object, made in the image of the deity's altar, and probably did not have a utilitarian purpose (§ 52, Nos. 1, 2). Fig. 38.

2-15. From Corinth. (a) Rectangular terracotta arula painted in the Caeretan style. About 530 B.C. Only one angle with parts of two adjoining sides are preserved. Height 0.132 m., sides preserved to 0.065 m. and 0.0735 m., respectively. Altar originally square or rectangular in plan, and *ca.* 0.15 m. long. Hollow. Scenes represent a lion, and a pygmy battling a crane. Upper

⁶³ Petrie, *Naucratis*, I, pl. III.

⁶⁴ Koldewey and Puchstein, *Griechische Tempel*, I, p. 7, fig. 5 e.

molding only, including a cyma painted with doric leaf pattern. (Miss Swindler considered this arula an importation from Magna Graecia. (b) Fragments of a similar altar found at Corinth prove that this ware was of a local manufacture. Scene: siren (body of bird, head missing) on one side; swan on other side. Approximately same size originally as previous arula. (c) Fragments of 12 more arulae from Corinth. Second half of sixth century and fifth century. (d) Corinthian arula from Scione, of Corinthian style. Early fifth century. Professor Robinson now believes that, though found in Scione, it is of Corinthian origin. Height 0.115 m.; length 0.127 m. Painting of Seilenos on front, geometric pattern on two adjoining sides, back plain. In collection of D. M. Robinson. Terracotta. As Professor Robinson says (as cited below), all these arulae are the earliest arulae from the Greek mainland, and indicate that terracotta arulae originated here, rather than in Magna Graecia.—(a) Mary Hamilton Swindler, "A Terracotta Altar in Corinth", *A.J.A.*, XXXI, 1932, pp. 512-520, figs. 1, 2, colored plate F. (b) Broneer, *Hesperia*, XVI, 1947, pp. 214-223, pls. L-LIII. (c) *Ibid.*, pp. 216-220. (d) D. M. Robinson, *C.V.A., Robinson Collection*, I, p. 57, pl. XLVIII.

16, 17. From Cyprus. Now in the Cesnola Collection, Metropolitan Museum, New York. Two archaic stone arulae. (a) Height 10 in. Relief on three sides, raised border around upper surface, partly damaged. (b) Height 9 $\frac{3}{8}$ in., half preserved. Two panels of low relief. Inscription.—Myres, *Cesnola Collection*: (a) p. 177, No. 1109; (b) p. 308, no. 1859.

18. Perachora. Arula with relief of human and animal figures, occupying full height of shaft. Fragment.—Karo, *Arch. Anz.*, XLVII, 1932, col. 139, fig. 15; Broneer, *Hesperia*, XVI, 1947, p. 221.

55. The Triglyph Frieze near the Ground. Two altars described above have a frieze of triglyphs and metopes (with a plinth or narrow "architrave") near the ground (Kerkyra, § 47, No. 7, and Syracuse, § 50, No. 3). A block of limestone from Aigina (0.80 m. by 0.30 m. in plan and 0.85 m. high) with part of a triglyph on the front and rear faces, belongs to some kind of a monument with a triglyph frieze.⁶⁵ The form of the glyphs is late archaic, and it is thought to belong to an altar. Similar in appearance is the triglyph wall at Corinth, where the

⁶⁵ G. Welter, *Arch. Anz.*, LIII, 1938, cols. 20-21. For a general discussion, see Rodenwaldt, *Korkeira*, I, pp. 66-69, figs. 52-55.

total height of the order is *ca.* 1.15 m.⁶⁶ All these examples belong to the archaic period. This use of the triglyph on a large scale near the ground was avoided after the archaic period, perhaps the only examples later than the sixth century being the fourth-century triglyph altar at Megalopolis (§ 79, No. 1), and the late fifth-century or early fourth-century triglyph altar at Perachora (§ 79, No. 2). The innovation evidently originated in Corinth, since three of the four archaic examples occur in Corinth and her colonies.⁶⁷ Several other examples occur in vase paintings.⁶⁸

In the Classical and post-Classical periods the triglyph was common in small friezes under the cornice of small structures, such as on reliefs and ceremonial altars. This use of the triglyph frieze became especially common in Magna Graecia, and occurs on many cylindrical altars and arulae described in the following chapter.⁶⁹

⁶⁶ *A.J.A.*, VI, 1902, pp. 306-320.

⁶⁷ Cf. F. P. Johnson, *A.J.A.*, XL, 1936, p. 53; Payne, *Perachora*, pp. 90 f.

⁶⁸ E.g., a vase in Bologna by the Niobid Painter, Beazley, *Attic Red-Figure Vase-Painters*, p. 418, No. 7 (where further references).

⁶⁹ The following may be added: *Corinth*, XV 1, pp. 67, 77-79, fig. 9, pl. 25 A (arula, Classical period, height 0.23 m., length 0.305 m.); *Olympia*, II, pl. XCV 8; *Ath. Mitt.*, LII, 1927, pp. 163-165 (fragments from Porto Rafti); Marconi, *Himera*, p. 150; *Mon. Ant.*, XXV, 1918, pp. 688-690 (Syracuse).

CHAPTER IV

THE CLASSICAL AND POST-CLASSICAL PERIOD

56. Characteristics of Period. The entire post-archaic era can be treated as a single period, distinct from the geometric and archaic period, because the several types show only slight variation throughout the era. This period differs from the developed archaic period also in that several new types appeared, and minor changes took place in some of the old surviving types.

The new types are: colossal, ceremonial in antis, terracotta (full sized), monumental with steps on the short side, cylindrical monolithoid, rubble cubical, monolithic well altars, and, less important, several types of miniature altars, stepped pyramidal altars, and hexagonal altars. Noteworthy changes in pre-Classical types are as follows: (a) rectangular monolithic altars became so popular and diversified that they comprise five sub-types; both rectangular and cylindrical monolithic altars received on the shaft relief ornamentation in four standardized varieties. Monolithic altars are the most numerous in this period, and occur very frequently in profane public places and in homes. (b) Stepped monumental altars reached a much greater length and their proportions are generally more narrow in plan.

57. Note. In the lists below it is understood, unless otherwise stated, that the steps or prothesis, when present, are on the west side, and that the altar is to the east of the temple, if connected with one. The expression "proper orientation" signifies that the transverse axis of the altar is identical or nearly identical with the longitudinal axis of the temple. Dates given refer to the altar, not to buildings connected with the altar. Except as otherwise stated, it should be understood also that each type has the same characteristics as in the geometric and archaic period. Dimensions are usually given at the base.

Occasional parallels from representations in art are cited,¹ and

¹ Representations of altars on Phrygian vases have been briefly discussed by Dörpfeld and Reisch, *Das griechische Theater*, pp. 313 f.; see also Bieber, *History of Greek and Roman Theater*, p. 299 (illustrations); altars on 156 coins are listed by Anson, *Numismata Graeca*, pt. IV, pp. 1-17; numerous representations of various types are illustrated by Deonna, as cited in note 15.

mention is made of altars from regions not purely Hellenic. Extant altars are listed according to provenience, while representations in art are listed according to their latest known location. The full scene of representations in art is not described.

58. Monolithic Altars.² Monolithic altars are a simple form of stand for an elevated fire. They are common throughout Greek lands from the Classical period onward. According to form they are divided into cylindrical and rectangular. Frequently the altar rests on a square plinth. A prothesis before monolithic altars occurs in only a few instances (cf. also § 69, No. 2). Inscriptions often appear on the shaft of the altar. Monolithic altars occur especially in public places, near temples (but not usually as the main altar of the temple), in sacred precincts, and in houses. (For monolithic altars in houses, see § 66.)

As seen below, monolithic altars occur in all gradations of size, so that median dimensions have been used instead of typical. According to size, monolithic altars are divided into full-size altars and arulae, the former being those capable of supporting a sacrificial fire, that is, those which have an upper surface at least 0.20 m. or 0.30 m. square. (For arulae, see §§ 65, 66.) Monolithic altars range in size up to the largest practicable for monolithic construction, the largest dimensions occurring after the Hellenistic era. Post-Classical examples generally have more slender proportions. The form of monolithic altars is often reproduced in miniature altars. Stepped pyramidal (§ 67) and hexagonal altars (§ 68) may be considered varieties of monolithic altars.

Many rectangular and less frequently cylindrical monolithic altars, especially those of Roman date, partake equally of the nature of chthonic altars to the heroised dead, and of funeral monuments.³ These altars do not differ in form from other altars, and are not grouped separately.

² For supplementary material, especially illustrations of the various types of monolithic altars, cf. § 65, Arulae and Thymiateria; § 66, Altars in Houses. Among inscribed altars may be mentioned 11 from Pergamon: Hepding, *Abh. Mitt.*, XXXV, 1910, pp. 451-463 (four are arulae); I have not seen Raubitschek, *Dedications from the Athenian Akropolis* (1949), Chapter IV, "Stelai and Altars."

³ Hellenistic grave altars are discussed by Altmann, *Die römischen Grabaltäre*, pp. 1-8, where also references to altars not listed below. On altars connected with burial chambers, cf. Studniczka, "Altäre mit Grubenkam-

The decorative motifs of Greek cylindrical and rectangular monolithic altars occur also on Roman altars, with greater or lesser differences.⁴

59. Cylindrical Monolithic Altars. The top of cylindrical monolithic altars is always a plain flat surface (except for rare representations in relief), and almost always there is above and below a simple projecting molding in the form of a cyma or a single curve, with a torus or a tainia. A square plinth base occurs in several examples (Nos. 1, 11, 12, 33, 53, 60, 130, 136, 140; cf. two terracotta arulae from Olynthus, § 65, Nos. 29-41).⁵

The largest dimension listed below for cylindrical monolithic altars is 1.568 m. height (No. 55, Delos); the next largest dimensions are 1.52 m. in diameter (No. 141, Olympia) and 1.40 m. height (No. 74, Kos); all are of Roman date. Eight more altars are listed (Nos. 36, Cilicia; 43, Pergamon; 50, Cume; 75, Kos; 114, Pergamon; 117, Rhodes; 140, Knidos; 142, Rhodes) having height of 1 m. or more, and all are post-Classical. Three altars have a diameter exceeding 1 m. (Nos. 1, 74, 114). Six definite examples can be assigned to the Classical period (Nos. 11-13, 22, 26, 138). Forty-seven altars are listed with height and diameter. Named in order of ascending *ratio of height to diameter*, they may be grouped as follows: 0.6—0.9:1, Nos. 141, 38, 39, 132, 114; 1:1, Nos. 59, 138; 1.1:1, Nos. 3, 15, 58; 1.2—1.3:1, 57, 117-128, 139, 2, 4, 51, 70, 115, 129, 73, 75, 142; 1.4:1, Nos. 74, 105, 40; 1.5—1.8:1, Nos. 104, 43, 16, 44, 113, 135, 116; 2—3.2:1, Nos. 56, 130, 55, 50. In post-Classical times the proportions are generally more slender. But the five altars having a greater diameter than height are probably all post-Classical (Nos. 39, Rhodes; 114, Pergamon; 132,

mern", *Jb. Oest. Arch. I.*, VI, 1903, pp. 123-186. For funeral ceremonies in Asia Minor see Pfuhl, "Das Beiwerk auf den ostgriechischen Grabreliefs", *Jb. Arch. I.*, XX, 1905, pp. 47-96, 123-155; cf. esp. pp. 88-92.

⁴ Much useful material (classified examples and commentary) will be found in Altmann, *Die römischen Grabaltäre*; cf. Helen Bowerman, *Roman Sacrificial Altars*, pp. 59-72 (the "hourglass" form), 73-76 (volutes).

⁵ A plain cylindrical altar (no moldings), with square abacus at top and bottom, and snake around the shaft, is seen in a fourth-century relief: Svoronos, *Das Athener Nationalmuseum*, p. 441, No. 1441, pl. LXXI. See also *Not. Scav.*, 1891, p. 387 (Syracuse); Wiegand and Schrader, *Priene*, p. 378, fig. 477; *Délos*, XVIII, pls. CIII, CIV; *Corinth*, XV 1, pp. 67, 77, pl. 24 B (fifth century).

Sparta; 141, Olympia). The average height is 0.8 m. and the average diameter is 0.65 m. The median height is 0.8 m., and the median diameter 0.7 m. Bracketed examples are not included in the calculations of this paragraph. About sixty examples have inscriptions.

Scenes in relief with human or animal figures appeared in the Classical period, and became more popular in Roman times. Ornamental devices in relief, on the other hand, are hardly known before the Hellenistic period.⁶ The altars of this type are grouped below in four varieties, according to the ornamentation on the shaft. Where there is a narrow frieze in low relief of triglyphs, bucrania, or rosettes, this is disregarded in the classification.

(1) Plain Shaft

Plain monolithic cylindrical altars are frequent throughout Classical, Hellenistic, and Roman times. Cylindrical bases and well-eyes frequently exhibit the same architectural characteristics as plain monolithic cylindrical altars.⁷

1. Athens, just inside the Dipylon Gate, Roman period. Diameter *ca.* 1 m. On square plinth. End of third century. Dedication to Zeus Herkeios, Hermes, Akamas.—Middleton and Gardner, *Plans and Drawings of Athenian Buildings* (J. H. S. Suppl. Paper No. 3), p. 22, No. XXXIII A, pl. 24, I.G. II², 4983; Michel, *Recueil d'inscriptions grecques*, 752.

2. Delos, Sanctuary M on Mt. Kynthos. Height 0.53 m., diameter 0.42 m. Top broken off.—Plassart, *Délos*, XI, p. 282, fig. 227 p. 281; cf. plan fig. 226 following p. 278.

3. Delos, Sanctuary of The Gods of Askalon on Mt. Kynthos. Height 0.65 m., diameter 0.55 m. Simple molding top and bottom. The upper face is concave. Dedication to Poseidon.—Plassart, *Délos*, XI, p. 287.

⁶ On the ornamentation of altars (bucrania, garlands, etc.), see Deonna, *Délos*, XVIII, pp. 381-383, with further references.

⁷ The following examples may be cited: (a) from Delos: Deonna, *Délos*, XVIII, text, pp. 94 f.; plates, pl. XXXVII No. 266; pl. XXXVIII No. 267 (has frieze of triglyphs and metopes in relief); pl. XLI Nos. 286, 287; (b) Pompeii: about 25 well-eyes of all kinds are illustrated and discussed by Pernice, *Hellenistische Tische*, pp. 12-37, pls. 7-23; (c) from Rhodes: a number of cylindrical statue bases are discussed and illustrated in *Clara Rhodos*, II, 1932, p. 200; *ibid.*, VI/VII, 1932/33, pp. 390, 400, 437.

4. Delos. Height 0.53 m., diameter 0.41 m. Simple molding top and bottom; above the upper molding the altar flares out from a sunken line (cf. No. 33). Two inscriptions: dedication to Zeus, Astarte, Aphrodite; sacrificial rules.—Leroux, *Délos*, II, p. 58, fig. 81.

5-9. Kos. (a) Near temple of Apollo. About the middle of the first century A.D. Dedication to Apollo. (b) Four others, with funeral inscriptions, are mentioned, probably second century.—Herzog, *Koische Forschungen und Funde*: (a) pp. 197-199; (b) pp. 117 (No. 171), 122 (No. 183), 134 (No. 200), 223 (No. 217).

[10.] Miletus, found under the floor of the Serapeion. Height 0.69 m., diameter at top 0.65 m. Molding at top (bead and reel, cyma, tainia) and bottom (same, except torus instead of cyma). The form of the moldings is perhaps of the sixth century. The inscription, a dedication to Apollo Lykeios, is of the first century B.C.—Knackfuss, *Milet*, I 7, p. 348, No. 282.

11-13. Motya, before 397 B.C. Three crudely fashioned altars from Motya show the Greek form; they have simple moldings at the top and bottom. Two are on rectangular plinths, one on a round base. Height 0.50 m. to 0.55 m.—Whitaker, *Motya*, pp. 268 f.; pp. 266 f., the adoption of the Greek type by the Phoenicians is discussed.

[14.] Olympia, east of the Bouleuterion. A plain drum (height 0.63 m., diameter 1.19 m.) on a low square plinth is considered an altar by the excavators, but that is improbable. It may be a base of some statue or monument.—*Olympia, Die Ergebnisse*, Tafelband II, pl. XCV 7. (The same may be true of a similar rectangular base, *ibid.*, pl. XCV 2.)

15. Priene, Sanctuary of the Egyptian Gods, probably third century. Height 0.59 m., diameter 0.52 m. Rather coarse work. Dedication to Serapis, Isis, Anoubis, Harpokrates, Invincible Herakles.—Wiegand and Schrader, *Priene*, p. 165.

16. Priene, Sanctuary of the Egyptian Gods, near the monumental altar (§ 72, No. 2), third century. Height 0.68 m., diameter 0.39 m. Rather narrow and very simple moldings top and bottom, elegant effect. Dedication to Isis, Serapis, Anoubis.—Wiegand and Schrader, *Priene*, p. 165; Schede, *Die Ruinen von Priene*, fig. 82 p. 70.

[17-21.] Five "altars" with concave profiles and one with cymated profile are illustrated and discussed by Caylus, *Recueil d'Antiquités* (Paris,

1756-1770), I, pp. 61-65, pl. XX. From Athens and Sparta. The upper diameter is one third or one fourth the lower diameter. They bear inscriptions to Hadrian, Apollo, Ogas, Ongas; the last three are in archaic letters. Height $2\frac{1}{2}$ to 3 feet. The upper surface has a depression, and in two cases there are traces of soldering outside this depression. These objects are not altars, but rather stands or bases of some sort, perhaps the supporting member of round offering tables.

Representations in Art. All have simple upper and lower moldings.

Dedicatory Reliefs

22-26. Athens, National Museum. (a) Votive stele to Demeter, from Thebes; beside the goddess is an altar; on top of the altar the ashes are heaped high into a cone. Early fourth century. (b) Relief from the cave of Apollo and Pan on the south slope of the Acropolis, third century. Three nymphs dancing around an altar which is about knee-high to the nymphs. (c) Fragment of a relief with a Pan on either side of an altar with simple moldings. (d) Fragment of a votive relief of a sacrificial procession: an hierodoulos leads a ram toward an altar, a man and a woman with the right hand raised in adoration, three children. (e) "Grotto relief" of Pentelic marble from Megara, of the fourth century; Hermes and three nymphs dancing about an altar, which is left rough dressed in order to have the appropriate rustic appearance, and is provided with a swelling at the top and the bottom in place of moldings.—Svoronos, *Das Athener Nationalmuseum*: (a) No. 1438, pp. 440, pl. LXXII; (b) No. 1956, pl. CXXXVI; (c) No. 1684, pl. CXXX; (d) No. 2861, pl. CLXXVII; (e) No. 1446, p. 449, pl. LXXIII; further references given for each altar. (b) Fig. 73.

27, 28. Delos. (a) Votive relief in the precinct of Artemis Eilithyia, of the end of the fourth century. Sacrificial procession: goddess, altar on square plinth, hierodoulos with ram, two adult worshippers with raised right hand in adoration, three children. (b) Fragment of a similar relief, with altar.—Plassart, *Délos*, XI: (a) p. 299, fig. 247; (b) p. 300, fig. 248.

Hero Reliefs. These represent a hero on horseback before an altar dedicated to him.⁸ Of this large group of reliefs only a few examples are necessary.

⁸ Hero reliefs of a different type in the Sparta Museum are listed and discussed by Tod and Wace, *A Catalogue of the Sparta Museum*, pp. 102-113; cf. Percy Gardner, *Sculptured Tombs of Hellas*, pp. 76-104, for examples of both kinds of hero reliefs.

29. Berlin, from Pergamon. Marble relief, crude work: altar somewhat less than knee-high. Dedicatory inscription.—*Pergamon*, VII 2, Winter, *Die Skulpturen*, No. 312, p. 254.

30. Berlin. From Cumae.—Kekule von Stradonitz, *Griech. Skulptur* (third edition), p. 169.

31, 32. Istanbul, Ottoman Museum, from Pergamon. (a) Lower part extant; flames above the altar. (b) The hero pouring a libation over the altar, soldier holding the horse, woman, altar with dog before it and tree (with snake) behind it. Third or second century.—Winter, *Pergamon*, VII 2: (a) pp. 255 f., No. 317; (b) pp. 248 f., No. 302, suppl. pl. 33. (b) Mendel, *Catalogue des sculptures* (Mus. impér. ott.), I, p. 237, No. 90. Fig. 74.

33. Rhodes, Museo Archeologico, probably from Rhodes. The altar is on a square plinth.—Maiuri, *Clara Rhodos*, II, 1932, p. 69.

Vase Painting

34. Catania. A bell crater from Camarina with a Phlyakes scene has an oddly shaped altar: it rests directly on a low plinth, without any lower molding, and the upper molding consists of a flaring out at the top (cf. No. 4).—Pace, *Arte e civiltà della Sicilia antica*, II, pp. 469 f., fig. 342 p. 472.

(2) *With Figures in Relief*

In this group are included altars having on the shaft representations of human or animal figures or scenes. The relief is on the shaft of the altar, usually midway between the moldings. The scene may be in a panel (No. 52; cf. Nos. 117, 118) or, usually, with no border at all; it may be in low or high relief. Altars with relief representations of garlands and bucrania, with or without sacrificial elements, form group (3).

[35.] Athens, National Museum, late fifth or early fourth century. Height 0.44 m. Base of Pentelic marble, top broken away, with relief representing the twelve gods. May be an altar.—Svoronos, *Das Athener Nationalmuseum*, No. 1731, pp. 158-163, pl. XXVI; von Sybel, *Ath. Mitt.*, 1879, pp. 337-350, pl. XX.

36. Cilicia, interior, second or third century A.D. Height 1.17 m. Altar with head in relief on the shaft.—*Monumenta Asiae Minoris Antiqua*, III, p. 30 f., No. 53.

37. Florence Museum. Altar with relief representing the sacrifice of Iphigeneia. Neo-Attic technique. Sculptor's signature, Kleomenes.—Ame-
lung, *Führer durch die Antiken in Florenz*, pp. 55 f., No. 79; Michaelis, *Röm. Mitt.*, VIII, 1903, pp. 201-209.

38. Probably from Kos, now in Istanbul. Hellenistic. Altar with relief of four Nikai with outspread wings and billowing veils holding aloft rich garland of leaves, fruits, flowers; between the folds of three of the loops of the garland is a bird. Figures mutilated. Koan provenience is deduced on stylistic grounds. Height 0.71 m., diameter *ca.* 0.94 m. This may be merely a base.—Modona, *L'Isola di Coe nell'antichità classica*, p. 160, pl. XIII A; Mendel, *Catalogue des sculptures* (Mus. impér. ott.), pp. 383 f., No. 1150.

39-42. Four more round bases or altars of the same type are known, of which two are certainly from Rhodes; the first one is 0.60 m. high and has a diameter of 0.77 m.—Jacopi, *Monumenti di scultura del museo archeologico di Rodi (Clara Rhodos, V 1)*, pp. 36-41; Maiuri, *ibid.*, II, p. 52. (The same motif occurs on a grave altar in Italy of Imperial times: Altmann, *Die römischen Grabaltäre der Kaiserzeit*, fig. 84 p. 102.)

43. From Pergamon, now in Berlin. Height 1.08 m., diameter 0.70 m. On the shaft, relief of octagonal star above a chariot with three horses representing Helios.—Winter, *Pergamon*, VII 2, pp. 338 f., No. 420, illustration.

44. Rhodes, Museo Archeologico. From cemetery of Makri Steno. Height 0.41 m., lower diameter 0.25 m., upper diameter 0.215 m. Upper and lower moldings, and another one, wider than the upper one, *ca.* 0.08 m. from the top. Shaft tapers slightly. In the center of the shaft there is a small dwarf figure in a niche. This is rather in the style of reliefs from Asia Minor in late Roman times. Funeral inscription.—Jacopi, *Monumenti di scultura del museo archeologico di Rodi (Clara Rhodos, V 1)*, pp. 94 f., fig. 62.

45, 46. See Nos. 130, 131.

47. Samothrace, Hellenistic and Roman. In the Arsinoeion are two superimposed foundations, the lower one 1.60 m. by 0.60 m., the upper one

1.25 m. by 1.08 m. This seems to be the foundation of a rectangular altar, or possibly a fragment of an archaistic relief with a dancing woman from a circular monument, which was found near by, may be part of a cylindrical altar over this foundation.—Lehmann-Hartleben, *A.J.A.*, XLIV, 1940, p. 339.

(3) *With Garlands and Bucrania in Relief*

The device of bulls' heads connected by festoons is first encountered in architecture in the second century.⁹ In minor art, however, they appear in the first quarter of the third century on some silver vessels found at Tarentum.¹⁰ The device gained popularity on altars from the second century onward,¹¹ and in the first century stag skulls (distinguished by the horns) became current. Generally there are four bucrania or elaphocrania, over which a rather thick garland is hung, falling in deep loops between them. In the loops are frequently paterai or some other ornament. The garland is generally of leaves bound with fillets, but frequently also flowers, fruits, and grape bunches are intertwined. The crania appear in two types: either a skull, with no flesh, or a head with skin, eyes, ears, etc. Besides grave altars, cylindrical well-eyes and a terracotta brazier also are found in the style of these altars.¹² Some examples listed below have only garlands or only bucrania.

48. Athens, Bakkheion, in room east of the assembly hall, near the door. Second century A.D. It bears an erased inscription.—Dörpfeld, *Ath. Mitt.*, XX, 1895, p. 179.

49. Athens, Theater of Dionysus, third or second century. This large marble altar has a garland around the shaft suspended from the four masks of Dionysus which are at the four cardinal points; in the loops of the garland are four paterai segmented in the form of rosettes. The upper profile has

⁹ *Pergamon*, II, pl. 30; cf. A. H. Smith, *A Catalogue of Sculpture* (British Museum), III, p. 294; see also D. S. Robertson, *Greek and Roman Architecture*, pp. 210, 212 note.

¹⁰ Wuilleumier, *Le trésor de Tarente*, pp. 48-55, pl. 7.

¹¹ For the use and origin of this motif, see Deonna, *Délos*, XVIII, pp. 380-383; also J. D. Beazley, *J.H.S.*, LIX, 1939, p. 36; cf. R. S. Kinsey, *Bovine Elements in Greek Art* (Unpublished Johns Hopkins Dissertation, 1941), pp. 117-121, 221.

¹² Well-eyes from Delos: Deonna, *Délos*, XVIII, pl. XXXVIII, Nos. 268, 270, 271; terracotta brazier from Priene: Wiegand and Schrader, *Priene*, fig. 586 p. 463.

an egg and dart with astragal, and the lower one a leaf and dart with astragal over a guilloche torus.—Hans Dragendorff, "Altar aus dem Dionysos-theater in Athen", pp. 16-21 in *Stephaniskos*; Picard, *L'Acropole, Le plateau supérieur*, etc., pl. 75.2. Fig. 75.

50. From Cumae, now in Istanbul. Hellenistic, height 1.22 m., diameter 0.38 m. Paterai in the loops of the garlands; above the upper molding, truncated cone covered with reticulate pattern of laurel leaves, hollowed out to serve as cinerary urn; covering not extant.—Mendel, *Catalogue des sculptures* (Mus. impér. ottom.), III, pp. 322 f., No. 1084, illustration and further references. Fig. 40.

51-69. Nineteen altars from Delos. (a) Built in a wall near the Hypostyle Hall, Roman period. Height 0.55 m., diameter 0.42 m. Fruits in the garland, bunches of grapes hanging from the garland. (b) Hollowed out and used as a well-eye, Roman period. Fruits in the garland. (c) Three altar bases to the east opposite a triple shrine in the sanctuary complex of the Poseidoniasts of Berytus. Only the square plinth and circular base of the southern one preserved, only the foundations of the middle one, and the top of the northern one is broken off. This last one is 1.568 m. high and 0.70 m. in diameter. One of the four bucrania is broken off. Dedicatory inscription. (d) Almost touching the krepis of the Ionic naiskos at the south end of the Portico of Philip. Preserved height 0.98 m., diameter 0.50 m. On a high rectangular plinth, to the side of the entrance. (e) Two altars from the southwest slopes of Mt. Kynthos. Height 0.81 m., diameter 0.68 m. (E 804); height 0.625 m., diameter 0.55 m. The former altar broken vertically in half, fragments from one half extant with dedication to Zeus Helios. The latter badly weathered. (f) Temple of the Gods of Askalon. Height 0.75 m., diameter 0.75 m. Dedicatory inscription. (g) Ten altars published only in photograph: one is on a square plinth, two have stag skulls, two have dedicatory inscriptions.—Leroux, *Délos*, II: (a) p. 59, No. 2; (b) p. 66. (c) Picard, *Délos*, VI, pp. 21-23, pls. II-IV. (d) Vallois, *Délos*, VII 1, pp. 111-113, fig. 165, pls. X, XII. Plassart, *Délos*, XI: (e) p. 119; (f) pp. 284 f. (g) Deonna, *Délos*, XVIII, pls. CVI-CIX, figs. 938-940, 944-946, 952, 954-956.



FIG. 40. Cumae. Cylindrical monolithic altar with garlands and bucrania. Hellenistic.

(§ 59, No. 50)

70. From Knidos, now in London. Over a funeral chamber. Height 2 ft. 4½ in., diameter 1 ft. 10 in. Inscription.—A. H. Smith, *A Catalogue of Sculpture* (British Museum), II, p. 218, No. 1357; cf. pp. 202 f.

71-74. Kos. (a) Two altars, both with dentils in the upper molding and cyma reversa in the lower. One has an inscription in Greek and Latin. (b) From crossroads of Ghernè, first century A.D. Height 0.825 m., diameter 0.64 m. Four inscriptions of names in the genitive. (c) From crossroads of Ghernè. Height 1.40 m., diameter 1.00 m. Rich decoration, with cornucopia. Inscription of name in the genitive, over an erased inscription.—(a) Maiuri and Iacopich, *Clara Rhodos*, I, 1928, p. 96, figs. 78 A and B. Maiuri, *Clara Rhodos*, II: (b) p. 226; (c) p. 224.

75. From Kos, now in Istanbul. Third century B.C. Height 1.09 m., diameter 0.82 m. Fruits and fillets in garland; dentils in upper molding; below the upper molding a narrow frieze of stylized scroll alternating at intervals with circles between two tainiai.—Mendel, *Catalogue des Sculptures* (Mus. impér. ottom.), III, pp. 384 f., No. 1151, illustration; Modona, *L'Isola di Coò nell' antichità classica*, p. 160, pl. XIII B.

76-102. Kos, probably from ancient cemeteries. Twenty-seven altars of Roman date. All have Greek funeral inscriptions; three have Latin inscriptions. Some have garlands only.—Herzog, *Koische Forschungen und Funde*, pp. 73-77, Nos. 48-57; Paton and Hicks, *The Inscriptions of Cos*, pp. 169-176, Nos. 164-191.

103. Lesbos. Roman period. This altar has a shallow depression in the upper surface, near which are two snakes in relief (cf. Nos. 139, 140; § 65, No. 2). About the shaft is the usual garland over stags' skulls. Inscription to Aristandros Hero.—Jane Harrison, *Prolegomena*, second edition, fig. 98, p. 330 (reproduced from A. Conze, *Reise in der Insel Lesbos*, pl. IV, fig. 5, p. 11).

104-112. London, British Museum. (a) Height 0.54 m., diameter 0.37 m. Two ox skulls and one stag head; fillets in the garland. Funeral inscription. (b) Height ca. 0.65 m., diameter 0.46 m. Two bucrania; bell-shaped pendants and grapes on the garland. Funeral inscription. (c) Fillets and grapes in the garland. Funeral inscription. (d) Six altars 0.70 m. to 0.86 m. high.—A. H. Smith, *A Catalogue of Sculpture* (British Museum), III: (a) p. 293, No. 2285, fig. 40; (b) No. 2286; (c) No. 2287; (d) pp. 380-385, Nos. 2480-2485.

113-116. Pergamon. (a) Built in a wall, only front visible. Height 0.67 m., diameter *ca.* 0.40 m. Top broken off; star fish in one loop, lizard in another. (b) Now in Berlin. Height 1.006 m., diameter 1.16 m. Broken in two fragments, damaged surfaces. Hellenistic. Dedicatory inscription of Eumenes. (c) Now in Berlin. Height 0.625 m., diameter *ca.* 0.50 m. Lower profile has cyma reversa, egg and dart; upper molding has dentils, cyma recta; skulls with elks' antlers; the shaft tapers upwards slightly. (d) Height 0.90 m., diameter 0.50 m. The top is broken off. Three laurel-leaf garlands, bound at the higher parts with fillets; no bucrania; in the loops of the garlands are three phialai with a rosette pattern about the omphalos; two snakes entwined about each garland.—Winter, *Pergamon*, VII 2: (a) p. 340, No. 424; (b) p. 337, No. 418, pl. XLI; (c) p. 338, No. 419; (d) pp. 340 f., No. 425. (a) Conze, *Arch. Mitt.*, XXIV, 1899, p. 160, illustration.

117-128. Twelve altars from Rhodes (and neighboring islands). They range in date from the second century B.C. to the first or second century A.D. Height 0.53 m. to 1.16 m., diameter 0.44 m. to 0.96 m. One has grapes in the garland; a second has vine sprays; another has a cornucopia on the shaft; four (Nos. 73, 88, 113, 134, 135) have bucrania but no garlands. All have funeral inscriptions.—Jacopi, *Clara Rhodos*, II, 1932, pp. 219-234, Nos. 61, 62, 71, 73, 88, 89, 90, 94, 95, 113, 134, 135.

129. Rhodes, now in the Museo Archeologico. Height 0.48 m., diameter 0.39 m. Stag skulls.—Jacopi, *Clara Rhodos*, V 2, 1932, pp. 13 f., No. 13599, fig. 5.

130, 131. Rhodes, two altars with relief panels. (a) From the cemetery of Makri Steno. Height 0.635 m., square plinth 0.62 m. by 0.65 m. and 0.30 m. high. Stag skulls of odd appearance: lower part is without skin, upper part has skin, hair, eyes; laurel festoons; under one of the skulls small niche with funeral relief. Funeral inscription. (b) Height 0.46 m. Small square panel with relief of two women added later. Inscription.—(a) Jacopi, *Clara Rhodos*, V 2, 1932, pp. 9-14, pl. I; (b) Benndorf and Niemann, *Reisen in Lykien und Karien*, p. 25.

132. Sparta, Museum. Imperial period. Height 0.30 m., diameter 0.38 m. Fillets across the front of the bucranium.—Tod and Wace, *A Catalogue of the Sparta Museum*, p. 169, No. 346.

133-135. Thera. (a) Temple of Caesar. Above the upper molding, the shaft extends slightly, to form a low circular platform. Under the upper

molding narrow frieze of triglyphs and metopes in low relief. Dedication to Caesar Augustus. (b) Dedication to Dionysus by Ptolemy Philopator and Cleopatra. First half of third century. (c) Top damaged. Height *ca.* 0.60 m., diameter *ca.* 0.35 m. Dedication to King Ptolemy Philometor and to the other gods, partly superseding an earlier inscription. Early second century.—F. Hiller von Gaertringen, *Thera*: (a) I, pp. 233 f., and illustration; II, fig. 15 p. 27; (b) I, pp. 17, 243; (c) III, p. 110, fig. 90. (a) *Idem*, *Festschrift für Otto Benndorf* (Masner Ed.), p. 229, illustration p. 230.

Representation in Relief

136. From Bovillae, now in London. Third century. Scene in four levels representing the apotheosis of Homer. The lowest level is a sacrificial procession similar to the ones from the Asklepieion in Athens: before Homer is an altar on a square plinth, waist-high to the figures which approach.—A. H. Smith, *A Catalogue of Sculpture* (British Museum), III, pp. 244-254, No. 2191, fig. 30 (where further references).

(4) *With Other Ornamental Devices*

Two have broad triglyph and metope frieze (Nos. 137, 141), one has a laurel wreath (No. 138), one has a frieze of acanthus leaves (No. 142), and two have a snake (Nos. 139, 140). Other altars have a bird (No. 38); octagonal star (No. 43); cornucopia (Nos. 74, 120); snake (No. 103); star fish (No. 113); narrow frieze of triglyphs and metopes (No. 133); phialae (Nos. 49, 116).

137. Alexandria, from cemetery of Gabbari, now in the Alexandria Museum, second or first century. Funeral altar with the interior hollowed out in order to serve as a funeral urn; the covering, which formed the projecting upper molding, is lost; below the upper molding there is a rather broad frieze of metopes and triglyphs in high relief; the six guttae under each triglyph are conical.—Delbrueck, *Hellenistische Bauten in Latium*, II, p. 154, fig. 90 p. 152.

138. Athens, south of the old Bouleuterion. Late fifth or early fourth century. Preserved height 0.79 m., diameter 0.855 m. The base molding has a well cut cyma reversa; the bottom was hollowed out to a height of 0.30 m. to reduce the weight, and there is a similar depression in the upper surface for the fire; two large bosses left on the shaft for moving; laurel wreath with

berries in flat relief on the shaft. This altar may belong in the center of the Tholos or in the new Bouleuterion.—Thompson, *Hesperia*, VI, 1937, pp. 151 f., fig. 87; *idem*, *The Tholos of Athens and its Predecessors* (*Hesperia* suppl. V, 1940), p. 47.

139, 140. Knidos, from the cemetery. (a) Height 2 ft. 6 in., diameter 2 ft. 1 in. Found in a tomb. (b) Height 3 ft. 6 in., diameter 2 ft. 5 in. On a square plinth. A snake is entwined around the shaft of each altar. (Cf. No. 103.)—A. H. Smith, *A Catalogue of Sculpture* (British Museum), II, p. 218, Nos. 1355, 1356; cf. pp. 202 f.

141. Olympia. On a plain round base 2.42 m. in diameter and 0.20 m. high are two superimposed drums 1.52 m. in diameter and 0.70 m. in total height. Five triglyphs are carved in relief on the side of these two blocks, forming a frieze which occupies the total height of the two drums. There is a narrow tainia above the triglyphs, but nothing below.—*Olympia, Die Ergebnisse*, Tafelband II, pl. XCV 8.

142. Rhodes, from Ialysos, now in the Museo Archeologico. Height 1.09 m., diameter, 0.83 m. The upper molding has an egg and dart molding above dentils; below this is a narrow frieze in low relief with rosettes, bucrania, garland; immediately above the base molding is another frieze of acanthus leaves. The surface is not well preserved.—Maiuri, *Annuario*, IV/V, 1921/2, pp. 237-242, figs. 2-4.

60. Cylindrical Monolithoid Altars. These rubble altars, all from Cyprus, were probably stuccoed, in order to take the place of cylindrical monolithic altars. Two semicircular altars (Nos. 3, 4) and one with the plan of a quadrant (No. 1) are included in the list.

1. Cyprus, Soli, Temple B (of Aphrodite) at Cholades, Altar 146. East of the entrance to room VII there is an altar whose plan is that of a quadrant with a maximum dimension in plan of 1.80 m. The binding material is gypsum mortar. It belongs to Period 4, that is, *ca.* 250 to *ca.* 350 A.D.—*S.C.E.*, III, text, p. 453.

2. Cyprus, Vouni, Temple of Athena. First half of fifth century. In front of the temple of Athena is a large walled court; to the right of the entrance altar 20, which is semicircular in plan, is built against the outside of the wall. The maximum dimension in plan is 2.60 m. It is made of a core

of irregular rubble faced with gypsum mortar. The top of the altar is damaged.—*S.C.E.*, III, text, pp. 90, 110 f., fig. 47 (plan) p. 94, plan VIII.

3-6. Cyprus, Vouni, the Palace. Four altars in room 123 in the annex northeast of the palace, 500 to 440 B.C. Room 123 was the main court of the temenos; in it are two altars semicircular in plan and two circular in plan. The circular altars measure 0.90 m. to 0.95 m. in diameter, are built of lime mortar to a height of 0.30 m. above the rock. Of these the one to the east is only partly preserved. There were accumulations of carbonized matter and ashes near these altars. The semicircular altars have a diameter of 1.80 m. to 1.85 m. and a height of 0.40 m. to 0.65 m. They are made of a core of rubble with a thick covering of lime mortar.—*S.C.E.*, III, text, p. 174, fig. 113, plan fig. 119 p. 189; plans IX (at end of volume); X (at end of volume) section IV; XV (following p. 186) section XXIX.

61. Rectangular Monolithic Altars. The altars of this type are cubical in form, and normally have slightly projecting moldings above and below. Three sub-types listed have relatively small members above the top horizontal molding. With the exception of three altars from Cyprus (Nos. 3-5), no extant altars listed below belong certainly to the Classical period. Rectangular monolithic altars occur in all gradations of size, from 1.27 m. in height to arulae less than 0.10 m. high. The ten altars with height less than length are under 0.64 m. high, except one, which is 0.83 m. high (Nos. 3, Kition; 6, 93, Kos; 14, 17, Miletus; 27, 55, 92, Rhodes; 79, Peiraeus; 84, Pompeii), and all but No. 3 appear to be rather late. These two characteristics, small size and broad, instead of slender proportions, are thus approximate concomitants with advancing date: on the one hand, they logically produce the elongated arulae which became very popular in Hellenistic and Roman times; on the other hand the normal monolithic altars of Roman and Christian date in Asia Minor and Syria, at least, are small, squat, and have excessively large upper and lower moldings (see footnotes 16 and 17).

It is probable that altars less than about 0.65 m. high were placed on stands of some sort, especially when occurring in public places. Altars less than about 0.30 m. high were certainly placed on stands or in niches, and in any case do not appear to have been used normally in public places, but rather in homes. The normal height for altars in public places was probably over 0.70 m. Stone altars less than 0.30 m. high may be con-

sidered portable altars, but are included here, if they have a large enough surface to support a sacrificial fire.

Of the forty-one altars below whose height is given, two are 0.25 m. high, twenty-four are 0.34 m. to 0.64 m. high, eight are 0.74 m. to 0.84 m. high, and six are 0.99 m. to 1.80 m. high. One is 0.685 m. high. Of the last group, three are from South Italy and of Hellenistic date (Nos. 70, Capua; 24, 89, Pompeii), and two from Greece and of Christian date (Nos. 1, Athens; 80, Philippi). The average height is 0.65 m. and the median height is 0.6 m. The average length is 0.6 m. and the median length is 0.66 m. Maximum lengths are 1.20 m., 1.14 m., 1.10 m.; minimum lengths are those of four altars (0.23 m. to 0.28 m.) which border on arulae.

The *ratio of height to length* (i.e., the greatest horizontal dimension) ranges from 0.2:1 (No. 6, Kos), 0.35:1 (No. 93, Kos), and 0.55:1 (No. 14, Miletus) to 1.85:1 (No. 89, Pompeii), 2:1 (Nos. 1, Athens; 87, Pompeii), and 2.2:1 (No. 20, Miletus). Between these extremes, five altars have a ratio of 0.75-0.80:1 (Nos. 27, 55, 79, 84, 92), and fifteen have a ratio ranging 1.2-1.7:1 (Nos. 13, 26, 25, 24, 88, 90, 68, 86, 85, 12, 54, 80, 4, 15, 16, 64, in order of ascending ratios). The *median ratio* for the 32 altars listed with height and length is 1.3:1. Thirty-one altars carry inscriptions.

Rectangular monolithic altars comprise five distinct sub-types: (a) flat-topped altars; (b) altars with barriers on top; (c) horned altars; (d) altars with gables or acroteria in relief above the top molding; (e) altars with concave sides.

A. FLAT-TOPPED ALTARS

Flat-topped rectangular monolithic altars are listed below in four groups, according to the ornamentation on the shaft: (1) plain shaft; (2) with figures in relief; (3) with garlands and bucrania in relief; (4) with other ornamental devices in relief.

(1) *Plain Shaft*

1. Athens, from Iobakkheion south of the Acropolis, Hadrianic age. The shaft tapers upward. Height 1.02 m., shaft 0.51 m.-0.49 m. by 0.48 m.-

0.45 m. in plan. Dedication to Artemis.—Graindor, *Athènes sous Hadrien*, p. 147; Schrader, *Ath. Mitt.*, XXI, 1896, pp. 266 f.

2. Attica, Cape Zoster, Temple of Apollo Zoster. Small marble altar, slightly damaged. No lower molding, evidently because embedded in ground.—Kourouniotis, *Arch. Delt.*, XI; 1927/8, pp. 45 f., fig. 41.

3-5. Kition, Cyprus. Fifth century. Altar 37 is a plain rectangular block, with a slightly concave top. Altar 38 is a plain rectangular block, with simple moldings one-third from top and bottom. Altar 40 is a rectangular block with a simple molding below. See § 40.

6. Kos. Height 0.25 m., 0.82 m. by 0.22 m. in plan. Dedication to "new god" Julius Caesar.—Herzog, *Koische Forschungen und Funde*, p. 229, No. 222.

7-23. Miletus. (a) Five altars with dedications to Trajan. Height 0.25 m. to 0.54 m. The dedication usually follows the formula:

Αὐτοκράτορι Καίσαρι Ἀδριανῷ Σεβαστῷ
Διὶ Ὀλυμπίῳ σωτῆρι καὶ οἰκηστῇ.

(b) Altar with dedication to Zeus, Apollo, Poseidon, etc. Height 0.34 m., width 0.23 m. (c) Altar with dedication to Apollo Didymaios, Hestia Boulaia, Demos. Height 0.485 m., width 0.35-0.38 m. First century. (d) Height 0.42 m., length 0.77 m., width 0.30 m. Dedication to Hermes, Hygieia and Tyche Agathe. (e) Height 0.59 m., length and width 0.35 m. Dedication. (f) Height 0.688 m., length 0.408 m., width 0.433 m. Inscription. [(g) Height 0.222 m., length 0.283 m., width 0.122 m. Inscription. (h) Height 0.235 m., width 0.20 m.] (i) Height 0.74 m. Dedication to Apollo Didymeus and to Hadrian. (j) Height 0.77 m., width 0.30 m., length 0.34 m. Dedication to Artemis Pythia and Hadrian. (k) Three altars with dedication to Apollo Didymeus Soter. Hellenistic and first century. Height 0.47 m., 0.18 m. and 0.28 m., respectively.—Knackfuss, *Milet*, I 7: (a) pp. 350-352, Nos. 290, 292, 294, 296, 297; (b) No. 298; (c) No. 299; (d) No. 300; (e) p. 349, No. 285; (f) No. 286; (g) No. 288; (h) p. 350, No. 289; (i) p. 353, No. 301; (j) p. 353, No. 302; (k) p. 348, Nos. 279, 280, 281.

24-26. Pompeii, Precinct of the Temple of Apollo. Tufa period (second century B.C.). (a) Against a column. Height 1.25 m., base 0.975 m. by 0.645 m. Cyma above and below. (b) Later used as a base of a statue of

Apollo. Height 0.84 m., base 0.682 m. by 0.681 m. (c) Against a column. Height 0.82 m., base 0.685 m. by 0.65 m.—Pernice, *Hellenistische Tische*: (a) pp. 63 f., fig. 27, pl. 38, 4 and 5; (b) fig. 28, pl. 39, 1 and 3; (c) fig. 28, pl. 39, 2 and 4. Fig. 41.

27, 28. Rhodes. (a) From the cemetery of Cova. Height 0.43 m., width 0.53 m. Funeral inscription, metrical in part. (b) Hellenistic. From Rodino, now in the Museo Archeologico of Rhodes. Width at base 0.24 m. Inscription.—Jacopi, *Clara Rhodos*, II, 1932: (a) p. 216, No. 56; (b) p. 233, No. 128.

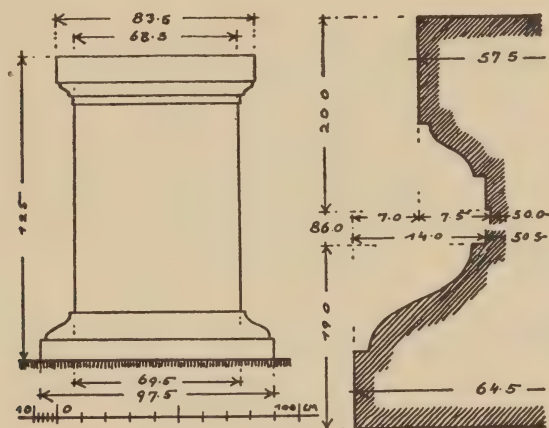


FIG. 41. Pompeii. Rectangular monolithic altar.

(§ 61, No. 24)

Representations in Art. This form of altar is the one most commonly represented in reliefs. Only a few examples are given below.

29-48. Athens, National Museum. (a) Fragment of relief. Altar bearing inscription. (b) Votive relief to Demeter and Kore. Fourth century. Sacrificial procession. (c) Votive relief from the Asklepieion with sacrificial procession. (d) Fragment of relief from the Asklepieion. End of fourth century. (e) Middle of fourth century. (f) "Grotto relief" from Eleusis, third century. Pan and nymphs dancing; in the midst a single block of stone, roughly squared, with rounded upper edges. (g) From the Asklepieion, Scene of sacrifice. Early fourth century. (h) From the Asklepieion. Fire on the altar. Second half of fourth century. (i) Twelve other reliefs have representations of altars.—Svoronos, *Das Athener Nationalmuseum*: (a) pl.

CCXX 1; (b) p. 507, No. 1016, pl. CLXXXIII; (c) p. 254, No. 1334, pl. XXXVIII 2; (d) pp. 262 f., No. 1362, pl. XL 1; (e) pp. 424-429, No. 1426, pl. LXIX; (f) pp. 443-449, No. 1445, pl. LXXIII; (g) pp. 246 f., pl. XXXV 1; (h) pp. 252-254, pl. XXXVI; (i) pp. 254, 257 f., 328, Nos. 1334, 1338, 1383; pl. XXXVIII 2, 3, 4; pp. 347 f., No. 1396, pl. L; pp. 288 f., No. 1369, pl. XXXVII 5; pp. 434 f., No. 1429, pl. XXXVII 6; pp. 356 f., No. 1407, pl. LXV 1; pp. 436 f., No. 1431, pl. LXX 4; No. 1485, pl. CXII 2; No. 2351, pl. CXLI 1 (with barrier?); No. 2409, pl. CXLVIII; No. 2850, pl. CLXXVII; all page references above provide further references.

49. Berlin. From Athens, middle of fourth century. "Grotto Relief." Dedicatory inscription.—Blümel, *Katalog der griechischen Skulpturen des fünften und vierten Jahrhunderts v. Chr.* (Berlin), pp. 62 f., pl. 74.

50. Kos. Relief built into the Turkish fortress. Man and woman in full face; two cubical objects, one at either end of the relief: the one at the left with a large snake in full spirals over it.—Petersen and von Luschan, *Reisen in Lykien, Milyas und Kibyratís*, p. 2, pl. II.

51. Paris, from Eleusis. Fourth century. Relief showing scene of offering to goddesses.—Laurenzi, *Clara Rhodos*, V 2, 1932, p. 184, fig. 55.

(2) *With Figures in Relief*

52. Athens, Bakkheion. Probably near the end of the second century A.D. In the small room to the east of the assembly hall behind a cylindrical altar is a rectangular altar with scenes of Dionysus in low relief on three sides. Inscription.—Dörpfeld, *Ath. Mitt.*, XX, 1895, p. 179, pl. IV; Schrader, *Ath. Mitt.*, XXI, 1896, pp. 265-269, pl. IX.

53. Lycia, north of Hausdono. Height 0.54 m. On the front face, dwarf figure; circular depression on the upper surface. Inscription.—Petersen and von Luschan, *Reisen in Lykien, Milyas und Kibyratís*, p. 150.

54. Pergamon. Height 0.63 m., length 0.41 m. to 0.39 m., width *ca.* 0.27 m. Tapers upward. Molding slightly below the upper surface. On the front face a garland suspended from two points forms a loop between the two ends which hang vertically; inside the loop is an eagle perched on a thunderbolt. The altar was probably dedicated to Zeus.—Conze, *Ath. Mitt.*,

XXIV, 1899, pp. 159 f., illustration; Winter, *Pergamon*, VII 2, p. 339, No. 422, illustration (same as preceding). Fig. 42.

55, 56. Rhodes, now in the Museo Archeologico. (a) Late Hellenistic times. Height 0.45 m., length 0.64 m. The upper and lower profile were roughly trimmed off later. Funeral scene in a recessed rectangular panel. (b) On top of the altar a patera in high relief set in a wreath of leaves and fruit; on the front face relief of the *Potnia Theron* holding two lions. Crude art, provenience uncertain.—(a) Laurenzi, *Clara Rhodos*, IX, 1938, p. 100, fig. 66. (b) Jacopi, *Clara Rhodos*, V 1, pp. 53-57, figs. 31-33.



FIG. 42. Pergamon. Rectangular monolithic altar.
(§ 61, No. 54)

(3) *With Garlands and Bucrania in Relief*

57. Pompeii, Altar VI 7, 18. Height 0.36 m. Bucranium in relief on one side. Late second or early first century B.C.—Pernice, *Hellenistische Tische*, p. 68, pl. 41.1.

58-62. Kos. Five rectangular altars of this type, with inscriptions, are mentioned from Kos.—Paton and Hicks, *The Inscriptions of Cos*, pp. 176 f., Nos. 192-196.

63. Priene, Ekklesiasterion. Third century. In the loops of the garlands are four medallions with portrait of Asklepios, Apollo, and two other gods.—Schede, *Die Ruinen von Priene*, pp. 63-66, figs. 74-78; Wiegand and Schrader, *Priene*, pp. 224 f., figs. 212-216.

64. Sparta, Now in the Museum. Imperial date. Height 0.57 m., length 0.35 m. Fruits and flowers in the garland, which hangs from bucrania at two corners, and from bearded Pan's heads at the other two. In the loops, masks. Inferior work.—Tod and Wace, *A Catalogue of the Sparta Museum*, p. 141, No. 49 a.

65. A Greco-Roman example of the first century A.D. may be cited: Zeus Ammon, horned, at two angles; rams' heads at two angles.—A. H. Smith, *A Catalogue of Sculpture* (British Museum), III, pp. 382 f., No. 2486, fig. 60.

Representations in Art

66. Athens, National Museum. A statue of Thanatos holding a torch behind him in one hand and in the other a torch over an altar with garlands.—Kastriotis, *Arch. Delt.*, X, 1926, *Parartema*, p. 4, fig. 6 p. 6.

67. Delos, Philadelphieion. Bronze plaque with relief of altar with bucranium and garland. Second half of third century.—Picard, *A.J.A.*, XXXVIII, 1934, p. 149, fig. 7 p. 148.

(4) *With Other Ornamental Devices in Relief*

68-70. Capua. Hellenistic. (a) Well formed triglyph frieze below the upper molding. (b) Height 0.36 m., 0.26 m. square at base. Small depression in top surface. Columns in relief at front angles.¹³ (c) Well executed pilasters at each corner, with capital resembling non-foliate corinthian. Base 0.94 m. by 0.62 m., height 0.99 m. Depression in top surface.—(a) Koch, *Röm. Mitt.*, XXII, 1907, pp. 395-399; fig. 15; (b) fig. 14; (c) pp. 405-407, fig. 21.

71-74. Miletus. Late Hellenistic or Roman. Four altars with dedications to Zeus Laurandus, Laurandos, Keraunios. Double axe on shaft.—Knackfuss, *Milet*, I 7, p. 347, Nos. 275-278.

B. ALTARS WITH BARRIERS

Rectangular monolithic altars frequently have along the short sides of the upper surface a raised portion serving to retain the coals and ashes. This barrier usually takes the form of a volute, but it is also

¹³ Cf. an arula from Olynthus, § 65, Nos. 29-41 (f).

found in the form of a cylinder or of a swelling ending above in a pointed edge, and even of a rectilinear oblong block.¹⁴ The height of the barriers rarely seems to exceed 0.05-0.07 m. It will be noted that, while the barriers of stepped monumental altars are usually separate slabs, placed vertically, those of ceremonial altars are usually part of horizontal slabs or blocks, and those of monolithic altars, part of the altar itself. In Greek altars the connecting member goes above the volute where it first reaches the volute, and then curves downward to form the volute. In two examples from Capua the connecting member passes under the volute and then curves upward to form the volute. A later development, perhaps in Greece proper confined to ceremonial altars, was the construction of an additional barrier over the swelling of the connecting member near the volute. This superposed barrier, as it is called here, is generally narrow, and rectangular in plan. A metal covering of the top of the altar is seen in the vase painting by Douris now in Boston (see No. 102).

75. Attica, Cape Zoster. For a small votive altar with pointed barriers, see below, § 65, No. 66.

76-78. Capua. Hellenistic. These are the top blocks from altars originally consisting of two (possibly three) blocks. They include the upper molding and a part of the shaft. (a) Height 0.23 m., length of shaft 0.40 m., and length at top of molding, 0.47 m. Above the molding are inverted volutes so that the space between them is level throughout. Tufa. (b) Upper blocks of two altars; in one, the volutes begin from the outside of the upper surface and therefore the two volutes are not united. Length 0.48 m. The second altar somewhat similar, but damaged. (c) Upper block of altar. Length of shaft 0.89 m. Only one volute preserved. It has an acanthus leaf between the volute and the connecting member. Over the swelling of the connecting member there is a narrow rectangular superposed barrier.—Koch, *Röm. Mitt.*, XXII, 1907: (a) pp. 399 f., fig. 16; (b) pp. 402 f., fig. 19 b; (c) pp. 403 f., fig. 20.

79. Peiraeus. A rectangular monolithic altar with barriers on top along the short sides, in the form of vestigial volutes, was found at Peiraeus, in a

¹⁴ A vase painting shows barriers in the form of upright slabs reaching a disproportionate height: Daremberg-Saglio, *Dict. d. Antiq.*, I, p. 351, fig. 421; Swindler, *Ancient Painting*, fig. 470.

building which was evidently a public building of post-Classical date. The altar measures 0.637 m. high (to the level of the upper surface) and 0.814 m. long. It rested on a foundation which left a prothysis on a long side (to the northeast of the altar). It was placed against a wall.—Dörpfeld, *Atb. Mitt.*, IX, 1884, pp. 279-287, pl. XIV.

80. Philippi, near the southeast gate of the city. Probably end of second century A.D. or later. Height 1.80 m., length 1.10 m., width 0.70 m. Dedication to Isis in Latin.—Collart, *B.C.H.*, LIII, 1929, pp. 82-87, fig. 11.

81-91. Pompeii. Greco-Roman. (a) In the Casa del Fauno. Post-Sullan. Volutes with superposed barriers of the same type as (c) above. Travertine. Oscan inscription. (b) Altar VI 7, 23 in the Casa d'Apolline. Same time. Tufa. (c) Altar V 3, 4. Tufa altar broken in half, each half subsequently used separately as the top of an altar. Probably tufa period (second century). Same type of volutes without barrier. (d) Altar VIII 2, 25. Built of two altars clumsily united, of the tufa period. Height to the middle of the depression on the upper surface 0.83 m., length 1.20 m. Thickly plastered over. The volutes are reduced to a plain cylinder, but the connecting member remains in the usual form. (e) Altar IX 5, 2. Height 0.56 m., length 0.37 m. Tufa core, covered with a thick layer of stucco. Stucco bandelette around it in place of garlands. The volutes are rather stylized, narrow, and not near the edge. Rotule about the middle of the volute. (f) Altar VIII 5/6, 16. Height 0.56 m., length 0.40 m. Instead of volutes, there are merely cylinders partly sunken in the upper member of the altar. (g) Altar VI 11, 19. Height 0.75 m., shaft 0.38 m. square. Volutes of rather cylindrical form on the sides and plain barriers extending across the back. (h) Altar IX 9. Height 0.585 m., length 0.44 m., width 0.38 m. Tufa covered with thick layer of stucco. Plain barrier on three sides, none at the rear because altar was built against a wall. (i) In the precinct of the Temple of Apollo, against a column. Rectangular barriers. Height 1.27 m., base 0.682 m. by 0.65 m. (j) Before the Doric temple in the Forum Triangulare are three altars. They are in a row, parallel to the front of the temple, but somewhat displaced from the longitudinal axis of the temple by the funeral monument. They date in the second century, when the doric temple was in ruinous condition. All have barriers. The largest altar is a tripartite ceremonial altar, under which heading it is described (§ 69, No. 18). The other two are monolithic. They have volute barriers with small superposed barriers: the smaller altar, near the ceremonial altar, height 0.783 m., base 0.522 m. by 0.58 m., the larger one 0.79 m. high.—Pernice, *Hellenistische Tische*: (a) p. 66, pl. 40.2; (b) p.

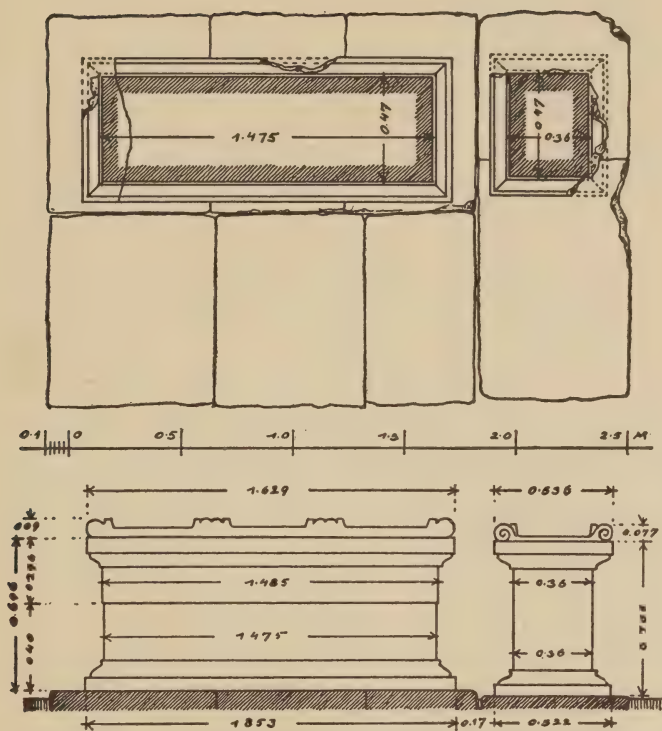


FIG. 43. Pompeii, Doric Temple. Two monolithic rectangular altars, one with three pairs of volute barriers.

(§ 61, Nos. 89, 90)

67, pl. 40.3; (c) pp. 67 f., pl. 40.5, 6; (d) pp. 60 f., pl. 37.5, 6; (e) p. 68, pl. 41.2; (f) p. 69, pl. 41.4; (g) p. 66, pl. 40.1; (h) p. 68, pl. 41.3; (i) pp. 62 f., fig. 26, pl. 38.3; (j) pp. 61 f., figs. 24, 25, pl. 38.2. (j) Mau-Kelsey, *Pompeii* (second edition), p. 139; Koldewey and Puchstein, *Griechische Tempel*, pl. V. Figs. 43, 76, 77.

92. Rhodes, Museo Archeologico. From the ancient cemetery of Rhodes. Second or first century B.C. Height 0.62 m., length 0.83 m., width 0.42 m. Only slightly damaged. Rectangular barrier on three sides with two low bosses on the upper surface in the shape of truncated cones. The rear of the altar has no molding. The upper molding has dentils with anthemion at the corners; the torus in the lower molding is carved with a guilloche pattern. Below the upper molding is a narrow frieze of alternating bucrania and rosettes with a garland schematically represented in low relief. The front face has a panel with a funeral relief in the round in the niche.—Maiuri, *Clara Rhodos*, II, 1932, p. 70, figs. 37, 38.

93. Rhodes, Museo Archeologico. From the Hellenistic cemetery of Kos. Height 0.40 m., length 1.14 m., width 0.40 m. Three ox-heads on each of the long sides, one on each of the short sides, with a rich garland. The bucrania and garland are extremely simplified on the rear side. Lock of shaggy hair on the forehead of the bucrania. The garland has flowers, ivy leaves, vine leaves, bunches of grapes, and is bound with fillets, which fall down on either side of the bucrania. The lower molding is a simple tainia. The upper molding consists of a wide projecting band with a rich running acanthus scroll ornament. On the lateral sides this member extends almost 0.20 m. beyond the dado, rising upward slightly and terminating in a volute. For a similar volute on a low monumental altar at Pergamon, see § 79, No. 3. Dowel marks indicate that some object was placed on the altar.—Jacopi, *Clara Rhodos*, V 2, 1932, pp. 21 f., fig. 10.

Representations in Art

94-98. Athens. (a) Relief from the Neronian stage of the Theater of Dionysus. The upper molding extends upward at the lateral sides from the shaft of the altar to form barriers. What seems to be a flat disk rests on the altar. There is a large rosette or phiale in relief on the front side. (b) Votive relief from the Hephaisteion. Fourth century. The upper molding extends upward to form pointed barriers. (c) The volutes are mere cylinders partly sunken in the flat upper member of the altar. (d) The altar has pointed

barriers similar to (b) above. (e) An altar with a gabled barrier is seen in a third-century relief from the Asklepieion, in a scene of sacrifice.—Svoronos, *Das athenere Nationalmuseum*: (a) pp. 232-236, pl. LXII; (b) pp. 328 f., No. 1383, pl. XXXVIII 4; (c) No. 2421, pl. CLII; (d) pl. XXXVIII 4; (e) p. 276, No. 1356, pl. L 3; (a) Fiechter, *Das Dionysos-Theater in Athen*, I (Antike griech. Theaterbauten, V), pp. 41-43, fig. 34; Herbig, *Das Dionysos-Theater in Athen*, II (Antike griech. Theaterbauten, VI), pls. X 1, XIII 1, 2; pp. 36 f.

99. Attica. Relief of warrior making libation on small altar: the volutes have been reduced to mere swellings at either end of the upper member of the altar, with the centers marked.—P. Gardner, *Sculptured Tombs of Hellas*, fig. 38, p. 102, from *Monuments Grecs*, pl. I.

100. New York, Metropolitan Museum (29.54). Fragment of relief. The volute and the connecting member are considerably narrower than the upper molding; there is also a narrow rectangular superposed barrier near the volute above the swelling of the connecting member.

101. Berlin. Red-figured lekythos with the egg of Leda on an altar. The member above the upper molding extends into volutes which are to the side of the altar, rather than on top of it; the connecting member is a continuous curve.—Furtwängler, *Beschreibung der Vasensammlung* (Berlin), II, pp. 676 f.; J. Harrison, *Prolegomena* (second edition), fig. 174 p. 649.

102. Boston. Cylix signed by Douris. About 480 B.C. The volute, formed by the extension of the member above the molding, again is on the side, rather than on the top of the altar; the connecting member is level and of the same thickness throughout; above this is another member, also level and of the same thickness throughout, which extends over the inner side of the volute. This element above the volutes and the connecting member is usually seen in vase paintings, and is evidently a metal covering which protects the stone from the fire.—Tarbell, "A Signed Cylix by Douris, in Boston", *A.J.A.* (sec. ser.), IV, 1900, pp. 183-191; Beazley, *Attic Red-Figure Vase-Painters*, p. 285, no. 78; Hoppin, *Handbook of Attic Red-Figured Vases*, I, pp. 230 f. (illustration). Fig. 44.

C. HORNED MONOLITHIC ALTARS

In the Roman period oriental cults brought to Greece and Italy a particular type of altar: over a rectangular shaft of an ordinary type, an

acroterion was placed at each corner of the upper surface. The acroterion was simple, triangular in plan at its base, ending in a point (cf. § 69, No. 7). This type of altar has been treated extensively elsewhere.¹⁵ Two examples may be cited:

103, 104. Delos. (a) Relief representation. (b) Arula.—Deonna, *B.C.H.*, LVIII, 1928, pp. 423 f., Nos. 165, 166.



FIG. 44. Cylix by Douris. Rectangular monolithic altar with volute barriers and firepan.

(§ 61, No. 102)

D. ALTARS WITH GABLES OR ACROTERIA IN RELIEF

At some time near or after the opening of the Christian era a distinct innovation occurred in the ornament of flat-topped monolithic altars: the form of the gabled stele¹⁶ was transferred to the altar so that

¹⁵ Deonna, "Mobilier Délien", II, "Bomoi keraïoukhai", *B.C.H.*, LVIII, 1934, pp. 391-447, where a great number of examples, including the oriental ones, are catalogued; see esp. pp. 435-441. See also Dunand, *Le musée de Soueïda*, *passim*. See Deonna, *Délos*, XVIII, pp. 371-389; cf. pl. CXI, for 12 altars with horns, of which eight are arulae (one round and one of metal).

¹⁶ For example, Möbius, *Die Ornamente der griech. Grabstelen*, pl. 60; Diepolder, *Die attischen Grabreliefs*, pls. 17-31; Conze, *Die attischen Grabreliefs* (8 vols.), Plates Vol. II 1, pls. CLVI-CLXIV, esp. pp. CLVIII (before

gables or acroteria or both were carved in relief on the upper part of the shaft; the horizontal molding, when still present, was then displaced from the uppermost part of the shaft, although the top of the altar remained a flat surface. This type became very common in the interior of Asia Minor and in the Orient.¹⁷ The following examples occur in Greece:

105. Rhodes. Rectangular altar 0.62 m. high, with gables in relief and palmettes in the gables. On upper surface, barrier on either side, between which two bosses broken off at the top. On the shaft, scene in relief. Bendorff and Niemann, *Reisen in Lykien und Karien*, p. 25, fig. 22 p. 26.

106. Drama. Altar with gables and Gorgon-head acroteria.—Demitsas, *Η Μακεδονία*, p. 784, No. 1017.

E. ALTARS WITH CONCAVE SIDES

Rectangular altars with the vertical sides concave, have been specially studied elsewhere.¹⁸ It is doubtful that they are derived from Minoan-Mycenaean stands with concave sides (§ 8). This form (especially when provided with rams' heads at the corners) seems to have been especially associated with a chthonic deity or with the chief male god. The type is common in the eastern Mediterranean in the second millennium B.C., and occurs in the central Mediterranean in the following millennium. In Greece the form hardly appears before the end of the Classical period (note examples). This type must be derived from sheet metal construction, and may also be related to the "hour-glass" type of funeral arulae from Magna Graecia (§ 65). The following examples are cited:

107, 108. Olynthus. For terracotta miniatures, see § 65, Nos. 6-41.

109. Berlin, from Pergamon. A "hero relief" shows a small figure, before which is either an altar with incurving sides, or more probably a

300 B.C.); see § 69 for several earlier examples of ceremonial altars with gables in relief.

¹⁷ For examples, see *Monumenta Asiae Minoris Antiqua*, 6 vols., *passim*. Most have funeral inscriptions. Volume V lists 70 examples. See also Dunand, *Le musée de Souéida*, *passim*, with useful commentary. Dedications to non-Greek gods, by non-Greeks occur frequently, but written in Greek.

¹⁸ Elderkin, *The Ancient Altar with Incurved Sides*.

brazier on a high metal stand. (Metal altars are mentioned in literature, e.g., Pausanias II, xvii, 6.) Crude work, post-Classical.—Winter, *Pergamon*, VII 2, pp. 254 f., No. 313, illustration.

62. Rectangular Monolithoid Altars. These masoned altars have the same form and size as monolithic altars (0.50 m. to 1.25 m. in length), and were evidently considered as monolithic (see § 49). Following the form of monolithic altars, they have no prothesis or steps, and may be said to be no larger than practical convenience demands. No examples of this type occur outside of Cyprus before the Hellenistic period (cf. §§ 29, 42) except the eighth-century altar at Vroulia (§ 34, No. 6), and an altar in an Olynthian house (No. 13).

1. Athens, Sanctuary of Zeus and Athena Phratrioi. Height 0.575 m., length 0.805 m., width 0.58 m. The sanctuary apparently did not have a temple. The altar was in the west corner of the enclosure, and had no base course, resting directly on bedrock. Four upright slabs of Hymettian marble, fitted at the corners with half-housing joints, clamped together, supported a covering slab, now missing. One upper corner broken off, the remaining surfaces fresh and clean. Upper molding fascia above ovolo, lower molding cyma reversa. Late fourth or early third century. Dedicatory inscription, one word on each side, to Zeus Phratrios, Athena Phratria. Now in the "Theseum" Museum.—Kyparisses and Thompson, *Hesperia*, VII, 1938, pp. 612-619.

2, 3. Colophon. In court of houses. See § 66, Nos. 1, 2.

4. Cyprus, Soli, Temple C at Cholades, Altar 148. Periods 2 to 4, ca. 100 B.C. to ca. 350 A.D. This altar, consisting of two ashlar bound with gypsum mortar, is in the center of the square courtyard.—S.C.E., III, text, p. 453, fig. 261, plan XXXV, section III.

5. Cyprus, Soli, Temple D at Cholades, Altar 150. Periods 2 to 4, ca. 100 B.C. to 350 A.D. In Period 2 this temple probably belonged to Isis. In Periods 3 and 4 it belonged to Serapis. It is built against the middle of the lateral wall of the central cella. Length 0.65 m., width 0.50 m. It is not bonded with the wall. The altar is constructed of limestone rubble, covered with gypsum mortar. The sides taper slightly upwards.—S.C.E., III, text, p. 454.

6-12. Delos, Sanctuaries on Mt. Kynthos. (a) Sanctuary H. Height 0.75 m., length 1.25 m., width 1 m. Constructed of large granite blocks with smaller ones in between. Only the blocks of the outer face are shaped.—Plassart, *Délos*, XI, p. 277. (b) Sanctuary L. Height 0.50 m., one meter square in plan.—*Ibid.*, p. 278. (c) West of Sanctuary of Zeus Hypsistos, four altars of large blocks of stone. Two of the altars are about 1.10 m. square in plan; the third altar, 1 m. by 0.40 m.; the fourth, 1 m. square.—*Ibid.*, pp. 290, 292, plan fig. 234. (d) Against the propylaea to the Agora of the Italians, a small altar of gneiss, *ca.* 0.50 m. high. Probably Hellenistic.—Lapalus, *Délos*, XIX, plan fig. 2; Courby, *Délos*, V, plan fig. 2; Vallois, *B.C.H.*, LIII, 1929, p. 230, g on plate X.

13. Olynthus. Early fourth century. House A viii 8, in the corner of the pastas. Altar of rubble faced with stucco, simple molding top and bottom. Height *ca.* 0.42 m., base 0.67 m. by 0.48 m.—D. M. Robinson, *Olynthus*, XII, p. 45, pls. 28.2, 29.5.

63. Rubble Cubical Altars. These rectangular rubble altars are 1.95 m. to 2.70 m. in length. This size is greater than that demanded by practical considerations, and was instead dictated by a desire for impressive effect. Despite their large size, their form is that of monolithic altars, not ceremonial. But even when stuccoed and painted over, they could not, because of their great size, give the impression of being monolithic altars. All examples are from Cyprus.

1. Cyprus, Soli, Temple B (of Aphrodite) at Cholades. Periods 2 to 4, 100 B.C. to 350 A.D. Altar 147 is in the center of the cella. Preserved height, 0.90 m., and 2.50 m. by 2.20 m. in plan. Built of rounded rubble, wedged with terracotta and stone fragments, rubble filling. Stuccoed on the outside. Near the altar, a cavity in the floor about 0.25 m. wide containing gray earth and ashes, covered with a square roof tile.—*S.C.E.*, III, text, p. 453, figs. 222, 223 p. 421; plan XXXVIII section II.

2, 3. Cyprus, Soli, Temple D (probably of Isis) at Cholades. Period 2, about 100 B.C. to after 50 B.C. Altars 152 and 153 are in the courtyard of the temple, later superseded by altar 154; of rubble; imperfectly preserved; orientation diverges considerably from that of the courtyard. They are rectangular, with a ramp on the side towards the cella. Dimensions exclusive of ramp: altar 152, 2.55 m. by 2.50 m. in plan; altar 153, 2.70 m. by 2.60 m. in plan.—*S.C.E.*, III, text, p. 454; plans XXXIV (following p. 420),

XXXVII sections XIV, XXXIV (following p. 462); fig. 249 p. 445, plans figs. 267, 273 pp. 483, 485.

4. Cyprus, Soli, Temple E at Cholades. Periods 3 and 4, about 100 A.D. to 350 A.D. The temple housed Serapis in the central cella, Canopus in the northern, and Eros in the southern. Altar 154 was situated between altars 152 and 153, partly covering them; properly oriented in the center of the court; imperfectly preserved; built of rounded rubble without mortar. Probably about 2 m. square, with a ramp. West of the altar there is a cavity in the earth which was filled with pine cones, which the excavator associates with the altar.—*S.C.E.*, III, text, p. 455, figs. 249, 250, and plans as cited in the previous reference.

5. Cyprus, Vouni, The Palace. Altar in room 117 in annex east of the palace. Period 3, beginning 430-410 and ending 380. Square altar of rubble with ashlar at the corners in the middle of the room. Perhaps originally faced with wooden planks, which were plastered with lime mortar. The altar is 1.95 m. by 1.70 m. A small extension is built by its east corner 0.55 m. by 0.45 m.—*S.C.E.*, III, text, p. 174; plan fig. 119 p. 188; cf. *A.J.A.*, XXXVII, 1933, pl. LXVII.

6. Cyprus, Vouni, The Palace. Altar in room 113 in annex southeast of palace. Period 1, about 500 to 450 or 440. Rectangular, of small rubble in quasi-reticulate pattern; no mortar facing; 2.70 m. by 1.54 m. in plan. The short side of the altar abuts against the middle of wall 40.—*S.C.E.*, III, text, p. 174.

64. Full-sized Rectangular Terracotta Altars. Full-sized terracotta altars, that is, altars which were large enough to have served for actual sacrifices (cf. §§ 58, 65), are found infrequently. All were light enough to be carried.

1. Olympia, Heroon. An earthen altar (perhaps only partly baked) was found in the circular room, measuring 0.36 m. in height and 0.54 m. by 0.36 m. in plan. It had been covered with twelve successive layers of white-wash, on each of which was the inscription $\text{HP}\Omega\text{OP}$ (twice $\text{HP}\Omega\Omega\text{Σ}$), with a sprig of bay leaves below the inscription on five layers, and in one case a rose. Simple cubical form, no moldings.—Boetticher, *Olympia*, pp. 322 f., figs. 73, 74; Curtius, "Die Altäre von Olympia", *Berlin Abb.*, 1881, No. VIII, pp. 21-26, ten illustrations on pp. 22-24, pls. I (colored), II (plan).

2. From Selinus, now at the Palermo Museum. A usual type of full-sized terracotta altar is hollow with openings at the sides, and reliefs on the front and frequently on the sides. One of several altars at Palermo is 0.46 m. high and 0.5475 m. by 0.32 m. in plan.—Whitaker, *Motya*, pp. 326-329, fig. 106.

3. From Locri Epizephyrii, now at the Walters Art Gallery in Baltimore. Of the same type as the preceding. It is *ca.* 0.50 m. long and *ca.* 0.20 m. high; on the front face is a scene in relief.

4-13. Of about 300 terracotta arulae from Magna Graecia, about 10 have the upper surface over 0.25 m. by 0.25 m.; about 50 have one horizontal dimension over 0.30 m.—E. Douglas Van Buren, "Terracotta Arulae", *Memoirs Am. Acad. Rome*, II, 1918, pp. 15-51.

The examples of the former group could have supported a fire, but it is doubtful that they were actually used for sacrifices. It is still less probable that the examples of the latter class could have served for actual sacrifices. The arulae from Magna Graecia are generally of the same type as No. 2. They date from the sixth century on, but most appear to be of Hellenistic and Roman date.

Representation in Relief

14. From Eleusis (?), now in the Metropolitan Museum (24.97.99). Hellenistic or Roman. Between two female figures is an altar (of terracotta?) approximately knee-high; flames above; it is on a square plinth, which is supported by scroll feet apparently intended to be of metal.

65. Arulae and Thymiateria. Arulae, as distinguished from full-sized altars, are those altars too small to support a sacrificial fire, but rather intended to receive merely a few hot coals (cf. § 58). Under this definition, one may consider as arulae those altars which have an upper surface less than 0.30 m. or 0.20 m. square. Perhaps those less than *ca.* 0.10 m. square at the top were used only to burn incense and perfume,¹⁹ while the larger ones were used also for token offerings and libations, consisting of a few drops of olive oil or wine, some salt grains,

¹⁹ On the use of incense at sacrifices cf. Daremberg-Saglio, *Dict. d. Antiq.*, I, p. 348B, and fig. 410; Paus. V, xv, 110.

or cereal grains. Other arulae were mere votive dedications, and not intended for use.

Arulae of stone and terracotta were, of course, portable, as were probably full-sized terracotta altars (cf. § 64). Portable altars as a group present problems of cult ritual, but are not especially treated here. Besides occurring as votive objects in temples, arulae also occur in cemeteries (particularly in Magna Graecia), but they occur especially in homes, where they probably were placed on wooden or metal stands (cf. § 64, No. 14) or in niches in the walls.²⁰

By far the greatest number of arulae known are Hellenistic and Roman examples of terracotta from Magna Graecia, where over 300 examples have been found.²¹ But arulae were known earlier, in Greece proper and in Magna Graecia, as is shown by the sixth-century examples from Selinus and Corinth (§ 54), of stone and terracotta, respectively. In addition, about 35 stone and terracotta arulae were found at Olynthus, dating not later than the middle of the fourth century, about 40 were found at Thera of Hellenistic and Roman date, several examples are known from both Miletus and Delos, and a considerable number were found at Pompeii (see §§ 65, 66).

Terracotta arulae are often hollow with openings at the ends; they may also be solid. The former type is the most frequent type in Magna Graecia, but not in Greece proper. Frequently their profile consists of two convex curves, in the so-called hourglass shape. Several examples with slightly concave sides occur also. Almost all the terracotta arulae from Magna Graecia have a scene in relief, which is low in the early examples, and almost free-standing in the late ones. Some examples also have a round depression in the top, to receive the coals. Only one altar from Greece proper has a relief scene on the side, Nos. 29-41 (b), but several have ornament in relief: Nos. 29-41, (a) and (h), all from

²⁰ For the house chapels at Pompeii, cf. Daremberg-Saglio, *Dict. d. Antiq.*, I, p. 347; cf. D. M. Robinson and Graham, *Olynthus*, VIII, pp. 322-325; F. Hiller von Gaertringen, *Thera*, III, p. 174. On altars buried with the dead, see A. D. Nock, *Classical Weekly*, XXXVII, 1943-44, p. 64 (right), where further references. The study on portable altars by F. R. Fairbank (*Br. Arch. Ass. Journal*, N.S., III, pp. 54-62) was not available.

²¹ Cf. especially Van Buren and Jastrow, as cited in the following note. On the dates of arulae, cf. D. M. Robinson and Graham, *Olynthus*, VIII, p. 324 note; Robinson, *C.V.A., Robinson Collection*, I, p. 57.

Olynthus. Stone arulae are usually simplified copies of full-sized rectangular monolithic altars. Painted decorations and scenes also appear on both stone and terracotta arulae. Metal altars, used to burn incense, are frequent also, and are called thymiateria. Thymiateria have entirely different shapes, and are usually not more than 0.30 m. high. Further information on arulae and thymiateria may be found in several special studies.²² For arulae with triglyph frieze see p. 139.

Besides the arulae in the studies cited and in the following section, mention is made of the following examples:

1. Corinth. Hellenistic. Cylindrical terracotta arula with flaring top. Found unused in a deposit. Height 0.084 m.—G. Davidson, *Hesperia*, XI, 1942, p. 124, fig. 13.

2. Crete, Now in the Herakleion Museum. Stone arula in the form of rectangular monolithic altar, with snake in relief on shaft, and bowl in high relief on top. The snake is approaching the bowl. Total height 0.215 m., height of shaft 0.18 m., width of shaft 0.09 m. Cf. § 59, No. 103.—Wide, *Arch. f. Religionswiss.*, XII, 1909, pp. 221-223, fig. 1.

3. Kos. See § 61, No. 6.

4, 5. Miletus. See § 61, Nos. 17, 18.

6-28. Olynthus. Twenty-three rectangular arulae from Olynthian houses, seven of stone, thirteen of terracotta. First half of the fourth century.

²² Stone and terracotta arulae and thymiateria are classified and analyzed by Deonna, *Délos*, XVIII, pp. 370-389; the stone and terracotta arulae at the Syracuse Museum are treated in *Not. Scav.*, 1891, pp. 379 ff.; for terracotta miniature altars see Jastrow, *Tonaltärchen aus den Westgriechischen Kolonien*, 1916, Unpublished Heidelberg Dissertation (abstract in *Arch. Anz.*, XXXV, 1920, cols. 102-104); *idem*, "Two Terracotta Reliefs in American Museums", *A.J.A.*, L, 1946, pp. 67-80 (with further references); Wuilleumier, "Brûle-parfums en terre-cuite", *Mél. Arch. Hist.*, XLVI, 1929, pp. 42-76; Van Buren, "Terracotta Arulae", *Memoirs Am. Acad. Rome*, II, 1918, pp. 15-51 (about 300 examples from Magna Graecia); for thymiateria see Wigand, "Thymiateria", *Bonner Jahrbücher*, CXXII, 1912, pp. 1-97, pls. I-VI (a survey of all the Mediterranean lands); cf. Kourouniotes, *Arch. Delt.*, VII, 1923, p. 174; Deonna, *B.C.H.*, LVIII, 1934, pp. 1-90 (abstract in *A.J.A.*, XL, 1936, pp. 356-360); Myres, *Handbook of the Cesnola Collection*, pp. 177, 279, 308 f., 532 (arulae from Cyprus); Inez Scott Ryberg, *An Archaeological Record of Rome* (Studies and Documents, XII), 1, pp. 154-176; 2, figs. 155-176.

Height 0.30-0.10 m.; length 0.25-0.13 m.; width 0.23-0.10 m. Three have a depression on top. Several examples have no molding on one side, which fact indicates that they were probably placed against a wall. Several examples have slightly concave sides. One has barriers, ending in a series of small knobs.—D. M. Robinson and Graham, *Olynthus*, VIII, pp. 322-325, where discussion, references to plates, and references to previous publication. Fig. 79.

29-41. Olynthus. Fifteen arulae from houses, of which five are incomplete. Eight of terracotta, four of marble, one of stone. Two terracotta arulae are cylindrical on square bases (one stepped); the remainder are rectangular. The height is 0.35 m. to 0.24 m., the length (maximum dimension in plan) is 0.298 m. to 0.163 m., and the minimum dimension in plan is 0.146 m. Five arulae are square at the base. They were found in houses A viii 8, F-ii 9, the Villa of the Bronzes, and the House of the Tiled Prothyron. The first three of these houses contained each a pair of arulae identical or nearly so.—D. M. Robinson, *Olynthus*, XII; (a) p. 45, pls. 39.3, 40.1, 40.2 [two cylindrical arulae, square base]; (b) p. 47, pl. 40.3, 4 [concave sides, cock in relief on side]; (c) pp. 191 f., pls. 168-172, two colored [two stone arulae with painting of bird]; (d) p. 212 and note, pls. 182.1 and 2, 172.1; (e) p. 215 and note [with discussion of the molding], pl. 183.1; (f) pp. 215 f. and note, pls. 188.2, 39.1, 181.2 [three arulae and fragment of another; one has ionic columns and a gabled barrier with acroteria]; (g) p. 222 and note, pl. 188.1 [in a room]; (h) p. 140, pl. 39.2 [top of arula (?) with schematic volutes, low relief on sides]; (i) p. 247 and note [two exactly similar arulae of Parian marble]. Figs. 78, 82.

42. Pompeii. One example from Pompeii (location VI 7, 18) is in effect a miniature rectangular monolithic altar, with a bucranium in low relief on the shaft. Small depression in top. Height 0.36 m., base 0.175 m. by 0.16 m. Tufa. (For other examples, cf. following section.)—Pernice, *Hellenistische Tische*, p. 68, pl. 41.1.

43. From Scione (?). Now in the Robinson Collection, Baltimore. See § 54, Nos. 2-15.

44. Syracuse. Small Hellenistic altar, probably of terracotta. Form similar to that of rectangular monolithic altars. Frieze of triglyphs under the upper molding. Upper molding has dentils.—Mauceri, *Siracusa antica*, pl. 49.

45-85. Thera. About 40 stone arulae were found at Thera, mostly in houses, dating from Hellenistic to Roman times. Their form is that of

rectangular or cylindrical monolithic altars. The maximum dimension of most is *ca.* 0.20-0.25 m. Twenty-three had inscriptions.—*Inscriptiones Graec.*, XII 3, Suppl., pp. 290-301 (with illustrations); F. Hiller von Gärtringen, *Thera*, I, pp. 247 f.; III, pp. 28 f., 154, 161, 166, 170-176; cf. *idem*, *Klio*, I, 1909, pp. 212-227.

86, 87. Cape Zoster, Attica, Temple of Apollo Zoster. Two small votive altars, slightly damaged, the larger one of marble, the smaller one of Kara stone. No lower molding. The smaller one has two pointed barriers.—Kourouniotes, *Arch. Delt.*, XI, 1927/8, pp. 45 f., fig. 41.

66. Altars in Houses.²³ Altars occur in the courtyard of Greek houses, and also in the rooms of the house, especially in niches (cf. also §§ 34, 43, 65, 81). Zeus Herkeios is the divinity to whom the altar in the court is normally dedicated.

The altar in the court was a full-sized altar (usually ceremonial, of relatively small size), capable of serving for actual sacrifices. In the absence of a special altar, the household hearth was probably used for sacrifices. It is, therefore, quite natural to find that in two cases (Colophon) the altar in the court is an adaptation of the simple hearth, consisting of four upright slabs, which were filled with earth and gravel. These altars are of unique form, for although they resemble hollow ceremonial altars, the fire was not lit in a deep depression, and the type is not intended to be chthonic. The altars in the rooms of the houses were usually *arulae*, used for incense. In both cases, rectangular forms are much more frequent than cylindrical forms.

Although references to an altar in the court of the house occur as early as Homer, the earliest extant examples are of the first half of the fourth century (Olynthus).

1, 2. Colophon. Two Hellenistic houses had structures, which are evidently altars, in the court before the *prostas*. Both consisted of four slabs

²³ On altars in houses, see Matthew Wiencke, *Greek Domestic Worship*, Chapter II (Unpublished Johns Hopkins Dissertation, 1947), where the religious significance of the inscriptions on house altars from Thera is examined; cf. P.-W. I, cols. 1647-1649; Mylonas in D. M. Robinson, *Olynthus*, XII, p. 388, with references; Bulard, *La religion domestique dans la colonie italienne de Délos d'après les peintures murales et les autels historiés*; Sjöval, *Zeus im altgriechischen Hauskult*, Chapter I; de Molin, *De Ara apud Graecos*, pp. 20-31.

set upright and forming a square *ca.* 0.80 m. and *ca.* 0.65 m. on the side, respectively. The interior of both was almost filled with stones and earth. These altars are of unique type. Cf. § 43.—Holland, *Hesperia*, XIII, 1944, pp. 124, 146, plan pl. XI.

3-10. Delos. At least eight plain cylindrical altars were found in homes, mostly in the court.—Chamonard, *Délos*, VIII 1, figs. 7 p. 27, 15 p. 41, 22 p. 50, 29 p. 62, 35 p. 78, 51 p. 117, 54 p. 120, 56 p. 128; p. 201; cf. VIII 2, pls. LXVI (*bis*), LV.

11. Delos. Rectangular altar in the court of house 11 E, evidently monolithic. Garlands and bucrania.—Chamonard, *Délos*, VIII 1, p. 34, fig. 11.

12-52. Olynthus. Over 40 altars of various types were found in Olynthian houses. First half of fourth century. (a) The location of 6 or 8 altars in the court was ascertained, of which 2 or 4 are partially extant. They are rectangular monolithoid or ceremonial. See § 69, Nos. 9-11. (b) About thirty-five arulae were found in houses, all but two rectangular. See § 65, Nos. 6-41.

53-60. Pompeii. Eight arulae from Pompeii may be cited as examples of the usual types there. The usual height is about 0.20 m. or less. Most are of stone and rectangular, but terracotta and cylindrical ones occur also. The moldings are generally disproportionately wide (according to standards of full-sized altars). One evidently has a barrier which in side elevation is curvilinear.—Pernice, *Hellenistische Tische*, pp. 69 f., pls. 41.6 (right), 42.1-5. Figs. 80, 81, 83.

61. Magna Graecia. About 300 examples. Cf. § 64, Nos. 4-13.

62. Thera. About 40 examples, Cf. § 65, Nos. 45-85.

67. Stepped Pyramidal Altars. Of this type only two examples are extant, but that it was not rare is shown by the existence also of two representations of the type in art. The type is evidently an outgrowth of monolithic altars.²⁴

1. Delos, near the propylon of the agora of the Italians, against a wall is a structure of two courses of white marble. The lower course is *ca.* 1.90 m. square; the upper one, *ca.* 1.26 m. square; and the total height is 0.538 m.

²⁴ On the stepped form, cf. § 9 note 41.

Middle of the third century. This may not be an altar.—Vallois, *B.C.H.*, LIII, 1929, pp. 229 f., f on plate X; cf. Courby, *Délos*, V, plan fig. 2 following p. 2; Deonna, *Délos*, XIX, plan fig. 2 following p. xii.

2. Kition, Cyprus. Altar 39, fourth century. See § 40.

Representations in Relief

3, 4. Athens, National Museum. (a) Fragment of relief from Aigina. Four-stepped altar on which lyre. (b) Fragment of relief from Peiraeus, three-stepped altar.—Svoronos, *Das Athener Nationalmuseum*: (a) No. 1950, pl. CXXXV; (b) No. 2636, pl. CLXIX. Kastriotis, *Γλυπτὰ τοῦ Ἑθνικοῦ Μουσείου*: (a) p. 339; (b) p. 399.

68. Hexagonal Altars, The Keraton at Delos. Hexagonal altars are a variety of monolithic altars, and seem to derive from Oriental forms. See Guhl and Koner, *The Life of the Greeks and Romans*, fig. 44 p. 52 for an octagonal altar.

1. Miletus. At Miletus a hexagonal pillar with simple upper and lower molding was found, with a dedication to Helios Serapis in letters of the late imperial period. It is 0.42 m. wide and 0.84 m. high. It seems to be an altar rather than a statue base.—*Milet*, I 7, No. 283, p. 348.

2. Doura. Hexagonal altar with inscription in Greek and Palmyrene.—Rostovtzeff, *Dura-Europos and its Art*, p. 45, pls. II 2, IV 4.

3. The position of the horn altar of Apollo at Delos has not been certainly determined. See Courby, "L'autel de cornes à Délos", *Mélanges Holleaux*, 1913, pp. 49-68 (a study of the ancient evidence); *idem*, *B.C.H.*, XLV, 1921, pl. VII, where the altar is placed west of the Temple of Apollo near the southeast corner of the Temple of Artemis; Homolle, *B.C.H.*, VIII, 1883, pp. 417-438, pls., XVII-XIX, placed the altar east of the Temple of Apollo, where "The Monument of the Bulls" is now generally placed; cf. Couchoud and Svoronos, *B.C.H.*, XLV, 1921, p. 270. Cf. also Picard, *Comptes rendus* (Académie des inscriptions et belles-lettres), 1935, pp. 484-489; Marinatos, *B.C.H.*, LX, 1936, pp. 241-244; Cahen, "L'autel de cornes et l'hymne à Délos de Callimaque", *Rev. Et. Grecq.*, XXXVI, 1923, pp. 14-25; Deonna, *Rev. Et. Anc.*, XLII, 1940, pp. 111-126.

69. Ceremonial Altars (see also §§ 46, 73). Ceremonial altars occur especially in rural sanctuaries, civic centers, and temples, but

three Olynthian examples (Nos. 9, 10, 11) occur in courtyards of houses. The 18 altars listed below are all ashlar, at least in their outer faces, except possibly No. 11. At least five have the body of the altar constructed of upright slabs, with an earthen or rubble core (Nos. 3, 6, 7, 9, 10). The body of the altar, where definitely known, ranges in length from 0.88 m. (No. 10, Olynthus) to 2.60 m. (No. 7, Delos). The average length of the body of the altar is about 1.6 m. Less than a third of the altars below are known to have a prothysis. The average total height is 1.3 m., the average length at the base is 2 m., and the average width at the base is 1.2 m. The ratio of average length to width is 1.7:1. Extremes of total height are 0.57 m. (No. 9, Olynthus) and 1.743 m. (No. 17, Pompeii). Extremes of length at the base are 0.94 m. (No. 11, Olynthus), and 3.60 m. (No. 8, Delos). If this type is considered together with ceremonial altars in *antis*, the average length at the base is 2.2 m., and the average width is 1.4 m. One altar (No. 6, Delos) was built on an elevated *krepis*. Barriers (cf. § 61 B) of eight altars are extant, of which four are volute barriers (Nos. 2, 16 [with superposed barrier], 17, 18) and four are rectilinear barriers with gables in relief (Nos. 6, 7, 9, 10). The remains of Nos. 1, 5, 8, 11 are so imperfect that they are considered ceremonial altars only on the basis of their dimensions in plan.

1. Athens. Cave of Apollo on the Acropolis. There are traces of a rectangular base, *ca.* 2 m. by 1.50 m., which was probably an altar before the cult statue, the position of which is indicated by cuttings in the rock.—Göttling, *Rhein. Mus.*, N.F., VII, 1850, pp. 1-15; Picard, *L'Acropole, L'Enceinte*, etc., p. 14, pl. 11. Cf. Cavvadias, *Arch. Eph.*, 1897, cols. 8 f., 15, pls. 1, 3; Judeich, *Topographie von Athen* (second edition), pp. 302 f.

2. Athens, Altar of Aphrodite and the Charites. Total height *ca.* 1.35 m., length of base and prothysis 1.638 m., width 1.452 m.; base of the body of the altar, length 1.38 m., width 0.963 m. A small volute on either side, gracefully formed but small. The body of the altar evidently monolithic.—Dörpfeld and Reisch, *Das griech. Theater*, pp. 34 f., fig. 8; Judeich, *Topographie von Athen* (second edition), p. 363; I.G. IV 2, pt. 5, No. 1161 b.

3. Athens. Acropolis, Near southeast Corner of Propylaea. Before the statue of Athena Hygieia are traces of a metal offering table (the base is *ca.* 1.70 m. by 1 m.). At a distance of 2.25 east of the base, four slabs formed the base of an altar with a base and prothysis course 1.75 m. square.

Dowel markings in the base indicate that the body of the altar was made of upright slabs surrounding what was probably a dirt core. Fragments of two slabs have been identified as belonging to this altar. The body of the altar was about 1.40 m. by 0.90 m. in plan. According to Plutarch, *Pericles*, xiii, 18, the altar was there before Pericles erected the bronze statue of Athena Hygieia.—Picard, *L'Acropole, Le plateau supérieure*, etc., p. 7, KL in fig. 1, p. 6; cf. Judeich, *Topographie von Athen* (second edition), pp. 242 ff.

3a. Athens, Agora, Peribolos of the Twelve Gods. The peribolos had an altar in the late sixth century; an altar of Hymettian marble probably stood on a base 2.16 m. by 0.96 m. of the late fifth century or later.—M. Crosby, *A.J.A.*, L, 1946, pp. 403 f.

[4.] Athens, Agora. Propylon south of Stoa of Zeus. Dörpfeld reconstructs an altar instead of the propylon. The platform of the altar would be ca. 7.40 m. by 6.80 m. in plan. Dörpfeld identifies it with the altar of Meter mentioned by Aeschines, I, 60.—Dörpfeld, *Alt-Athen und seine Agora*, pp. 226-228, pls. X, XIV, XVI; see Thompson, *Hesperia*, VI, 1937, pp. 160-167, for the identification as a propylon dated about 300.

5. Delos, Sanctuary on Mt. Kynthos. Three courses of granite blocks are extant to a height of 0.65 m. of a rectangle 2.20 m. by 1 m. in plan.—Plassart, *Délos*, XI, p. 283, fig. 229.

6. Delos, Temple of Hera. In front of the temple, which faced south, is a large krepis 0.60 m. high and 5.50 m. by 3.10 m. in plan, with three steps. On it is an altar whose base and prothesis is 0.20 m. high, and 2.22 m. by 1.32 m. in plan, total height 1.64 m. The body of the altar is made of four upright slabs, over which is a thick covering slab with barriers at each end in the form of triangular gables bearing acroteria in relief—Plassart, *Délos*, XI, pp. 206-210, figs. 172-175. Fig. 84.

7, 8. Delos. Two altars on either side of the altar near the entrance to the Agora of the Italians. See § 73, Nos. 4-6 (d). The orthostate at the end carried the molding in such a way that the joint cut across the molding vertically, contrary to the normal practice (§ 45). A further peculiarity is the fact that, besides the two barriers with horn acroteria (cf. § 61 c), across one long side there is a rectilinear barrier, bearing in relief a gable.

9. Olynthus. In house A vi 5. Probably second half of fifth century. The base and prothesis was made of five slabs: 0.09-0.07 m. thick, 1.02 m. by 0.74 m. in plan. The body of the altar, height 0.48 m.; length 0.88 m., width

0.53 m., consisted of upright slabs about a core which was probably filled with earth. The various stones clamped and doweled together. Part of covering slab extant with barrier with palmette and scroll ornament and antefixes. Sandstone.—D. M. Robinson, *Olynthus*, II, pp. 89-91, figs. 210, 211, 212; D. M. Robinson and Graham, *Olynthus*, VIII, p. 321 note, pls. 73, 81.2; see D. M. Robinson, *Olynthus*, XII, pl. 173.1, for a similar barrier.

10. Olynthus, House of Many Colors (F-ii 9). In the court (room i) against a wall, were found slabs and parts of a gabled barrier with palmettes at the ends, from a ceremonial altar. It was situated in a space left vacant in the pavement. Painted. Body of altar probably 1.20 m. long. Longitudinal axis east-west.—D. M. Robinson, *Olynthus*, XII, pp. 189 f., pls. 160.1, 164.2, 162.4, 163.1, 173.1, 158 (plan). Fig. 85.

11. Olynthus, House of the Tiled Prothyron. A courtyard altar was evidently placed in the pastas, on a base of irregular blocks, 0.94 m. by 0.645 m.—D. M. Robinson, *Olynthus*, XII, p. 210, pls. 175-178.

12. Olympia, West of the Metroon. Extant are three blocks clamped together forming the base and the prothesis, with a raised rectangle on the upper surface indicating the position of the body of the altar. Base and prothesis course 2.45 m. by 1.48 m. in plan, body of the altar 2.10 m. by 1.13 m. in plan.—Olympia, *Die Ergebnisse*, Tafelband II, pl. XCV, 3; Dörpfeld, *Alt-Olympia*, p. 67 (and fig. 1), identifies this with the altar of Athena or Homonoia, mentioned by Pausanias, V, xxv, 9; cf. Gardiner, *Olympia*, p. 123.

13. Olympia, Western end of Terrace. At the western end of the upper terrace, before the small temple and between the exedra of Atticus and the treasury of Sikyon, there is a fourth-century foundation of limestone blocks clamped together, 2.77 m. wide and 2.25 m. long, the west side of which formed a prothesis *ca.* 0.70 m. wide. This altar is usually identified with the altar of Herakles, mentioned by Pausanias, V, xiv, 7.9. The center of the base of the body of the altar is occupied by a simple round block, 0.98 m. in diameter and 0.40 m. high, and below that block was another, 0.64 m. in diameter and 0.51 m. high. Dörpfeld considered both blocks pre-Classical altars. The appearance of the blocks renders probable that they were merely part of the building material of the altar, but they must have been actual altars themselves, if we can accept at face value the evidence adduced by Dörpfeld of the existence of localized "Opferreste" (hearth?) nearly 1 m. directly

below the round blocks.—*Olympia, Ergebnisse*, Plates Vol. II, pl. XC 4; Dörpfeld, *Alt-Olympia*, pp. 38-40, 111 f., pl. 6 a, plan 7; Gardiner, *Olympia*, p. 220.

13a. Priene, Theater. *Ca.* 180 B.C. Large altar with monolithic shaft, and separate slabs for foundation, lower and upper moldings, and barrier. Dimensions 1.65 m. length, 0.93 m. width, 1.38 m. height. The barriers have a gable in relief, thus foreshadowing this form in the later monolithic altars (§ 61, D). Dedicatory inscription.—Wiegand and Schrader, *Priene*, pp. 240-242, figs. 236-238; Schede, *Die Ruinen von Priene*, fig. 87 p. 75. Fig. 45.

14, 15. Pompeii, two altars in the Palaistra. Before 63 A.D. (a) The base and prothesis course of the altar (1.53 m. by 1.23 m. in plan) consists of three large blocks. The total height of the altar is 1.306 m. The width of the body of altar is 1.13 m. The body of the altar consists of four superimposed blocks, the upper and lower one being only as thick as the rich moldings. In the middle of the upper surface was a rectangular depression 0.14 m. deep and 0.575 m. by 0.53 m. in plan which served as a fire pan. Almost touching one side of the larger altar is a staircase of six steps, slightly higher than the altar, with a slight recess where the upper molding of the altar projects. Pernice believes that this altar later served as a base of a statue and that the staircase was then built next to it in order to enable the athletes to place their crowns on the statue. He also believes that the Doryphoros found there was the statue in question. (b) The smaller altar was then built in front of the statue. It is made of reused ashlar. May be an offering table.—Pernice, *Hellenistische Tische*, pp. 58-60, figs. 22, 23 on p. 59, pl. 37.1, 4; cf. Mau-Kelsey, *Pompeii* (second edition), pp. 165 f., fig. 76.

16. Pompeii, Temple of Zeus Meilichios. Second half of first century. The base and prothesis course is 2.956 m. by 1.93 m. in plan; the body of the altar 2.112 m. by 1.186 m. in plan; the total height above the ground 1.614 m. The altar is constructed of tufa blocks plastered over so as to give the appearance of large marble blocks. The altar has a rich upper and lower profile; below the upper profile, which is provided with mutules, is a triglyph frieze and guttae. On top of the altar are volutes; there is a foliate ornament between the volute and the connecting member; the exterior surface of the volute is carved with a laurel wreath pattern bound in the middle, as is usual in Roman altars (see Altmann and Bowerman, as cited in note 4). There is a superposed barrier near the volute. The space between the two barriers is covered with lava slabs.—Mau-Kelsey, *Pompeii* (second edition), pp. 182,

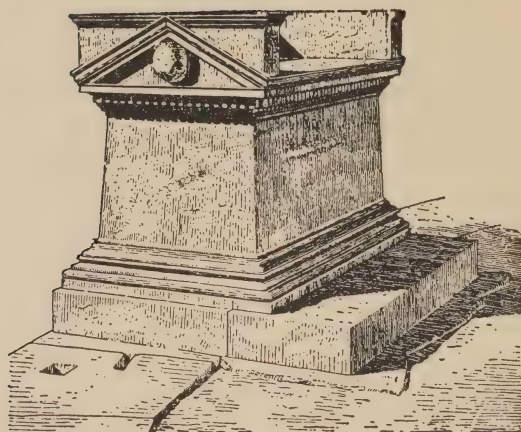


FIG. 45. Priene. Ceremonial altar (slightly restored).
(§ 69, No. 13a)

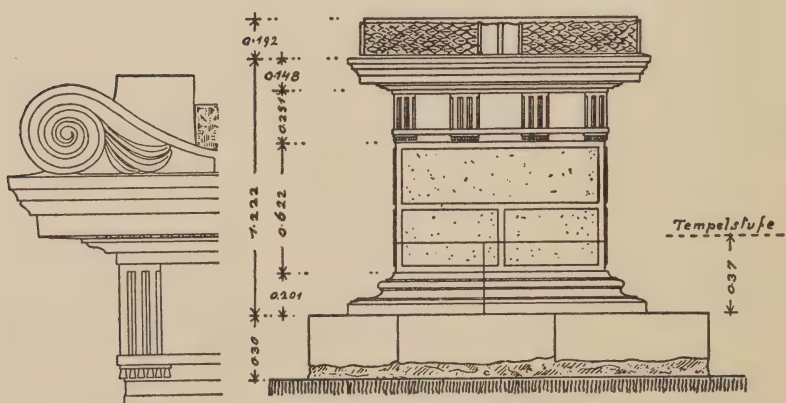


FIG. 46. Pompeii, Temple of Zeus Meilichios. Ceremonial altar with volute barrier and (left) superposed barrier.
(§ 69, No. 16)

440 f., fig. 251; Niccolini, *Fouilles de Pompei*, p. 22; Pernice, *Hellenistische Tische*, pp. 55-58, figs. 19-21, pl. 36. Fig. 46.

17. Pompeii, Temple of Apollo. Ashlar altar with volutes. Height 1.743 m., length 1.925 m. The prothesis and base course is of tufa; the shaft of travertine, the volutes of white marble, and between the volutes are three blocks of lava. The volutes are rather amorphous, with no relief, and resemble wedges with rounded base.—Pernice, *Hellenistische Tische*, pp. 65 f., figs. 30, 31, pl. 39.5, 6. Fig. 86.

18. Pompeii, Doric Temple. Before the Doric temple are three second-century altars (§ 61, Nos. 81-91, j). One is a ceremonial altar 0.708 m. high and 1.853 m. by 0.63 m. at the base, which has on the upper surface three pairs of volute barriers placed as if the altar consisted of three separate contiguous altars (cf. § 52, Nos. 6, 7). The volutes are not well formed and the entire altar was originally covered with a thick layer of plaster. Wide prothesis.—Pernice, *Hellenistische Tische*, p. 61, fig. 24, pl. 38, 1.

70. Ceremonial Altars in Antis. This type first occurs in the Classical period. It is formed by adding the antae of stepped monumental altars to ceremonial altars, so that the antae enclose most of the prothesis. The plan of the body of the altar and of the base and prothesis course is always oblong, with the antae on the long side. One example (No. 3, Selinus) has two steps (including the prothesis) between the antae.

The width of the body of the altar is considered to include the antae in the measurements below. The average dimensions for the body of the altar are about 2.8 m. by 1.7 m. The largest is 3.51 m. by 2.057 m. (No. 2, Delos), and the smallest 1.80 m. by 1 m. (No. 3, Selinus). The average dimensions of the base and prothesis are 2.9 m. by 2.2 m. The largest is 3.71 m. by 2.62 m. (No. 2), and the smallest is 1.92 m. by 1.61 m. (No. 4, Thasos).

[1.] Athens, Agora. Instead of the temple of Zeus and Athena, Dörpfeld places an altar over the rectangular foundation between the temple of Apollo Patroos and the Metroon. Since the foundation seems to have projecting antae, the altar to be reconstructed would have been a ceremonial altar in antis or a small stepped monumental altar, 5.30 m. by 3.70 m. in plan. A crudely finished block carrying a dedication to Zeus and Athena

found nearby has been interpreted as part of an altar, and assigned to this temple, by Thompson.—Dörpfeld, *Alt-Athen und seine Agora*, II, pp. 197-201, pls. XII, XVI; but cf. Thompson, *Hesperia*, VI, 1937, pp. 77-115, pls. III-V; fig. 55 (the altar).

2. Delos, Poseideion. The base and prothesis course is 3.71 m. by 2.625 m.; the body of the altar is *ca.* 3.51 m. by 2.057 m. with a recess on the east side giving the prothesis a width of about 0.80 m. The stone base of a metal table of offerings and of a *perirrhanterion* are extant before the altar.—Vallois and Poulsen, *Délos*, II, suppl., pp. 28-36; marked D on pl. III.

3. Selinus, Temple of Small Metopes. Fifth century. Small ceremonial altar in antis. The temple is *ca.* 16 m. by 5.90 m. in plan. The altar is accurately oriented in regard to the temple, and its center is exactly on the extension of the south face of the south wall of the temple at a distance of 4.40 m. Extant are two courses to a height of 0.70 m. of a rectangle 2.73 m. by 2.65 m. in plan. The upper course is recessed, as is the upper half of each of the two courses: a step and a prothesis 0.55 m. wide, are formed on the west side between the antae; the steps are continued as three successively recessed bands on the other three sides. The platform, which carried the body of a ceremonial altar was *ca.* 1.80 m. by 1 m. in plan.—Gàbrici, *Mon. Ant.*, XXXIII, 1929, pp. 82-84, pl. XVIII 6.

4. Thasos, Sanctuary of Poseidon, Hellenistic or Roman. Near the middle of the west wall of the temenos, on the outside, is a ceremonial altar in antis. Extant is the complete altar except part of the covering slabs. The course forming the base and prothesis (1.92 m. by 1.61 m. in plan and 0.175 m. high) is made from reused blocks, as is perhaps the rest of the altar. The body of the altar is 1.86 m. by 1.55 m. in plan with a depression in the front forming antae 0.36 m. wide at the sides; the maximum width of the prothesis is 0.29 m. The total height of the body of the altar is 0.91 m., including the barrier which encloses the hearth (1.20 m. by 1 m. in plan) on three sides, the east side (front) being open. This barrier is formed by the horizontal continuation of the antae; it is 0.16 m. high and 0.33 m. wide. The antae are monolithic, while the dado of the rest of the altar is formed by two courses of marble sheathing; gneiss slabs form the floor of the hearth; the altar was crowned by a projecting course of horizontal marble slabs laid on the barrier. Two fragments of the crowning were found on the hearth. On one of them was an archaistic inscription to Hera Epilemenia.—Bon and Seyrig, *B.C.H.*, LIII, 1929, pp. 333-337, 345-347, fig. 9, pls. XIX-XXI. Fig. 87.

5. Thasos, Court of the Sanctuary of Poseidon. Fourth century (?). This altar is of the same shape as the preceding altar. The base and prothesis course is 3.40 m. by 2.10 m. in plan and 0.10 m. high. The body of the altar is 3.35 m. by 1.55 m. with a recess 2.45 m. by 0.26 m. in plan which forms two antae. Located next to a well altar: § 76, No. 8.—Bon and Seyrig, *B.C.H.*, LIII, 1929, pp. 330-332, fig. 7, pls. XVI, XVII.

71. Stepped Monumental Altars. The general characteristics of this type remain the same in this period as in the preceding period (see § 48). Five altars are known to have had antae flanking the staircase (Nos. 1, 2, 7, 8, 16). Of the 21 altars listed below, five date in the fifth century (Nos. 1, 2, 3, 4, 15), six in the fourth century (Nos. 5, 7, 10, 12, 18, 20), four in the third century (Nos. 13, 14, 19, 21), three in the second century (Nos. [6, 11], 16), and two are not dated (Nos. 8, 9), but are probably third to first century. The altars of the fourth century have a somewhat more elongated ground plan than those of the fifth. No. 8 (Delos) does not conform exactly to the characteristics of stepped monumental altars as defined above, because the structural division is horizontal at the level of the prothesis, and the body of the altar does not extend the full length of the altar. No. 6 (Capua) is not of purely Greek form, and is included only for comparison. No. 11 (Miletus) has certain characteristics of colossal altars. No. 19 (Syracuse) is really of unique type, and is classed with stepped monumental altars only by extension of the type.

Disregarding Nos. 6 and 19 for the reasons just indicated, and also No. 9 because of its unusually small size as compared with the next smallest Greek altar (No. 15), we may consider that the typical measurements in this period are between 10 m. and 56 m. length and between 2.42 m. or 3.30 m. and about 26 m. width. Disregarding the same three examples, the average dimensions are about 25 m. length and 10 m. width, and the ratio of average length to width is about 2.5:1. Thus, in this period this type averages nearly 10 m. more in length, and nearly 4 m. more in width; and the ratio of length to width is greater than in the preceding period. There is wide variation in the ratio of the length of the altar to its distance from the temple to which it appertains, and in the ratio of the length of the altar to the width of the temple, but usually both ratios are between 1:1 and 1:2.

1. Akragas, Sanctuary of Demeter and Kore (cf. § 35, Nos. 2-5). Foundations of a stepped monumental altar (15.37 m. by 8.15 m.) are extant 15 m. east of temple L, properly oriented, dating in the middle of the fifth century. Part of only one course is preserved above the foundations. It shows three small recessed bands on the short side, and they continue around the anta so as to face the prothesis; each band forms a small step *ca.* 0.16 m. wide and high. The altar must have had a broad staircase between the antae, and a rather high prothesis. Nine rock-cut pits were found between the altar and the temple.—Marconi, *Agrigento arcaica*, pp. 99-102, plan fig. 65, pl. XVIII b, cf. plan fig. 5 p. 19, and pp. 37 f. Fig. 25.

2. Akragas, Temple of Hera (Juno Lacinia), 480-440 B.C. The temple is 16.895 m. wide; at a distance of 14.62 m. from it are the remains of the altar, which was 29.80 m. by 10.60 m. in plan. The remains consist of eight foundation walls running north and south, delimited at the north and south ends by transverse walls; the maximum preservation is six courses. The six walls to the east supported the staircase, several steps of which are extant *in situ*; the two walls to the west, which are wider apart and thicker than the other walls, supported the body of the altar. The staircase was in antis and had ten steps including the prothesis; the prothesis was *ca.* 1.40 m. wide; the body of the altar *ca.* 2 m. wide.—Koldewey and Puchstein, *Griechische Tempel*, I, p. 170, fig. 150; Rivella and von Pernull, *The Dead Cities of Sicily*, p. 73, fig. 53 p. 71.

3. Akragas, Olympieion, 480-440 B.C. The temple is 56.30 m. wide; at a distance of *ca.* 50 m. from the temple was the altar, of which is extant only part of the ashlar core of the foundation of the body of the altar. The body of the altar is *ca.* 56 m. by 12 m. in plan; thus, the length was equal to the width of the temple. The altar is on the longitudinal axis of the temple, and *ca.* 15° disoriented in regard to the temple. The full width of the altar would be at least double that of the body, about 26 m.—Koldewey and Puchstein, *Griechische Tempel*, I, pp. 153 f., figs. 135, 136; II, pl. 22.

4. Athens, Acropolis, Parthenon. The altar of the Parthenon (late fifth century) was probably at the same location as the altar of the earlier temple, the Hekatompedon. Rock cuttings give the size as *ca.* 15 m. by 6 m. See above, § 48, No. 20.

5. Athens. Later Temple of Dionysus at the Theater of Dionysus. Southeast of the later temple of Dionysus is a rectangular foundation 11.50 m.

by 3.30 m. in plan, with its longitudinal axis running east-west; this is evidently the altar of the later temple (early fourth century) and probably was also the altar of the earlier temple (sixth century.)—Dörpfeld and Reisch, *Das griechische Theater*, pp. 10-72, fig. 70; cf. Judeich, *Topographie von Athen* (second edition), pp. 316-318.

[6.] Capua. Second century. Of a stepped monumental altar, there are preserved part of the foundations of the body of the altar (7 m. by 4.60 m. in plan) and architectural sculptures. Reconstruction uncertain.—Koch, *Röm. Mitt.*, XXII, 1907, pp. 368-385, figs. 1-9.

7. Cyrene, Temple of Apollo. The Greek temple is *ca.* 9.40 m. wide; at a distance of 2.30 m. from the temple was a stepped monumental altar which was 22.08 m. by 5 m. in plan. In the late seventh century it was of poros. Of this period extant *in situ* is the core up to the level of the prothysis; besides this, about two-thirds of the remaining blocks belonging to the altar were found built into the neighboring Roman buildings, including a large slab (length *ca.* 1.25 m.), ornamented with foliate and volute scrolls in relief, which formed the barrier at the top of the body of the altar. In the middle of the fourth century the exterior was rebuilt of Parian marble. The altar of this period is almost completely preserved, including part of the barrier, which was plain except for a molding around the edge and a volute in relief at the corner. The barrier was of a special form, curvilinear in side elevation except at the base. The altar has three steps in *antis* including the prothysis and a low step extending beyond the altar; the body of the altar is approximately half as wide as the entire altar; the total height of the altar is *ca.* 2.40 m. On the lateral side of the body is the dedicatory inscription of the altar.—*Africa Italiana*, V, Pernier, *Il tempio e l'altare di Apollo a Cirene*, pp. 61-70, figs. 59-68, pls. I-III, V; *Arch. Anz.*, XLIV, 1929, cols. 396-429. Fig. 90.

8. Delos, West of the Prytaneion. A unique type of altar, evidently mostly preserved, is illustrated by Vallois, *B.C.H.*, LIII, 1929, fig. 7 p. 196. The base is similar to that of the previous altar, with 5 steps leading to a prothysis (extending through the body of the altar) on which is an altar quite similar to the altar of Poseidon at Thasos (§ 70, No. 4; cf. also No. 3).

9. Delos, Sanctuary E on Mt. Kynthos. Sanctuary E apparently had no shrine, only an altar, which was 4.40 m. by 4.20 m. in plan, made of large granite blocks with a marble facing. Only the lower course of the founda-

tion is extant. There was at least one step on the west side of the altar, but further details of reconstruction are not clear. This type of shrine is rather a Semitic type.—Plassart, *Délos*, XI, pp. 262-265, fig. 206, plan fig. 219.

10. Epidaurus, Temple of Asklepios. *Ca.* 380 B.C. *Ca.* 32 m. east of the temple, which is 13 m. wide, are the lower courses of a structure 16 m. by 3.50 m. in plan, not oriented exactly as the temple, but with its south side approximately in the longitudinal axis of the temple. This is probably the altar of the temple rather than the one mentioned § 73, No. 10.—*B.C.H.*, XIV, 1890, pp. 639-642; *Monuments Antiques*, I, p. 14, pl. 56 (Defrasse); Lechat and Defrasse, *Epidaure*, plans pls. IX, X.

[11.] Miletus, Court of the Bouleuterion. Second century. Structure *ca.* 9.50 m. by 7 m. in plan, is notable for its rich ornamentation. May have taken place of altar.—Wiegand, *Arch. Anz.*, XVII, 1902, cols. 151-154, fig. 9.

12, 13. Nemea, Temple of Zeus. Most of the ashlar foundations are extant of an altar which measured at least 40.58 m. in length and 2.42 m. in width; it seems to belong to two periods: in the fourth century the length of the altar was equal to the width of the temple, and it was accurately oriented, while at a later date the altar was extended northward. The altar apparently had only one step. Architectural sculptures evidently belonging to the altar were also found.—Blegen, *A.J.A.*, XXXI, 1927, pp. 422 f., fig. 1.

14. Orchomenos, Arcadia, Temple of Artemis Mesopolitis. Third century. To the north of the late sixth-century temple was an altar, 17.30 m. by 3.54 m. in plan, which was approximately on the longitudinal axis of the temple but with a difference of orientation of 41°. Preserved above the base is one step. Apparently this altar was built over a much earlier one.—Blum and Plassart, *B.C.H.*, XXXVIII, 1914, pp. 78 f., fig. 7, plan pl. IV.

15. Paestum, So-Called Temple of Poseidon. *Ca.* 440 B.C. At a distance of 13.50 m. from the krepis are the foundations of the body of the altar, measuring 10.05 m. by 2.89 m. in plan. The complete altar was probably over twice as wide.—Koldewey and Puchstein, *Griechische Tempel*, I, p. 24, plan fig. 30 p. 31.

16. Samos, Heraion, altar IX. See above, § 48, Nos. 1-6.

17. Selinus, Monumental Altar East of Temple B. This altar may belong to the archaic period. It is not known to what temple it belongs. It

is oriented east-west instead of north-south. It is partly extant to a height of six ashlar courses (1.50 m.), with five steps on the north side. The core of the altar was ashlar, and the altar was *ca.* 22-25 m. by 8 m. in plan. The staircase was 4.45 m. wide in plan, the prothesis probably 1.45 m. wide, and the body of the altar probably 2.10 wide.—Koldewey and Puchstein, *Griechische Tempel*, I, pp. 92 f.; II, pl. 7; Hulot and Fougères, *Sélinonte*, pp. 236 f., plan p. 214.

18. Stratos, Akarnania, Temple of Zeus. Late fourth century. At a distance of 12.80 m. from the temple are foundations of what was probably an altar, 22.40 m. by 9.45 m. in plan, not oriented exactly as is the temple.—Courby, *Recherches archéologiques à Stratos d'Acarnanie*, pp. 15, 87, pl. II (plan; A and B are statue bases).

19. Syracuse, Great Altar of Hiero II. Middle of third century. Diodorus, XVI, lxxxiii, 2, says that Hiero II built an altar near the theater one *stadion* long and proportionately high. The Olympic *stadion* is 192 m. long, and the altar is actually 194.95 m. by 20.85 m. in plan. Extant are several courses above the base in the center and the south end; at the north end because of the slope of the ground the lower part of the altar was cut from the rock, and there the altar is preserved to a height of more than 3 m. On all sides of the altar the base consists of two steps and a molding; total height 2.055 m. In plan the altar resembles stepped monumental altars since it consists of two rectangles; the "prothesis" is 193.55 m. by 5 m. in plan, and the body of the altar is 194.95 m. by 15.85 m. in plan. It differs, however, from the usual arrangement of stepped monumental altars in that it has two small staircases in recesses at either end of the prothesis instead of a staircase across the entire front. From these staircases, ramps lead upward toward the center of the prothesis. It cannot be determined how access was gained to the top of the body. Fragments from two Doric friezes of different size, which evidently belong to the altar, were discovered at the site. The size and novel plan of this altar render it unique in form. It is most closely related to stepped monumental altars, from which type it developed. For grandiose effect it is matched only by colossal altars.—Koldewey and Puchstein, *Griechische Tempel*, I, pp. 70-74; II, pl. 10; for a study of the reconstruction see *Jb. Arch. I.*, XI, 1896, p. 54. Fig. 47.

20. Tegea, Temple of Alea Athena. Late fourth century. Of the altar there are extant parts of three courses of the foundation, which consists of a grid-iron pattern of ashlar in headers, with earth in the interstices. The

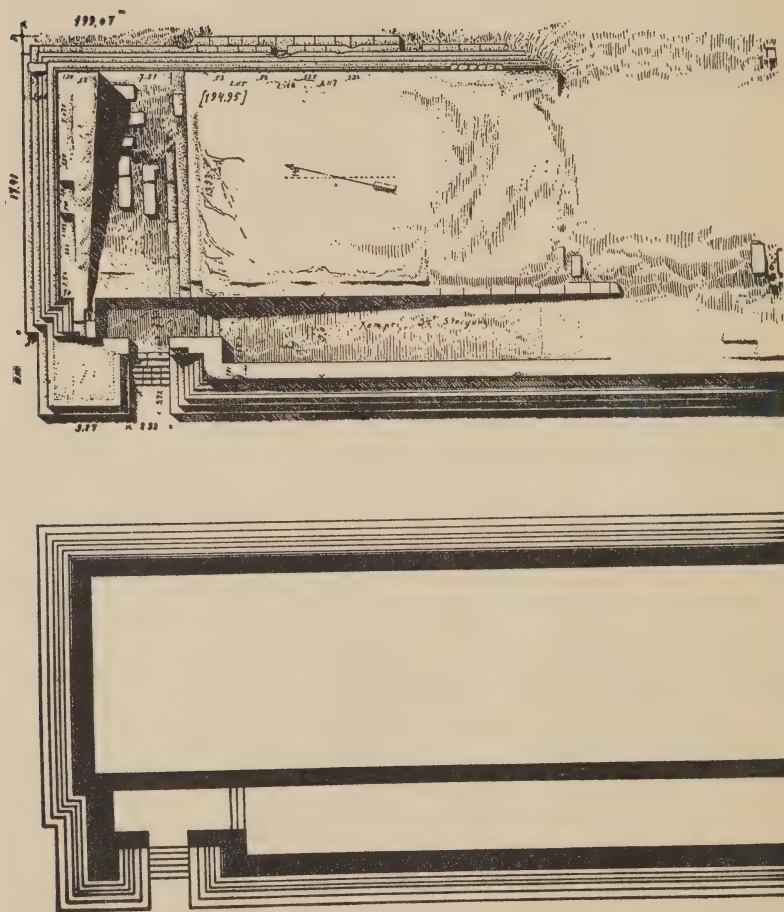


FIG. 47. Syracuse. Altar of Hiero II, remains and reconstruction of plan, northern end.
(§ 71, No. 19)

altar was 10.90 m. wide and more than 23 m. long. According to Pausanias, VIII, xlvii, 3, the altar was made by Melampous, son of Amythaon, and was adorned with 21 statues.—Dugas, *Le sanctuaire d'Aléa Athéna à Tégée au IV^e siècle*, text, pp. 66-69, fig. 24; atlas, pl. I/II.

21. Teos, Temple of Dionysus. *Ca.* 200 B.C. *Ca.* 17 m. to the east of the temple, a trial trench revealed the lower courses of "*un édifice à degrés*" *ca.* 8 m. wide, which must have been the altar of the temple. Assuming a ratio of length to width equal to 3, the length would be about 24 m.—Béquignon and Laumonier, *B.C.H.*, XLIX, 1925, p. 295, pl. VIII.

72. Monumental Altars with Steps on the Short Side. This group of altars consists of stepped monumental altars which had the steps on the shorter side of the body of the altar. They may be considered a distinct type or, less appropriately, merely careless variations from the standard type of stepped monumental altars.

1. Pergamon, Temple of Caracalla. To the east of the temple of Caracalla, on the paved way leading to it, is part of a base 5.50 m. by 1.90 m. in plan, whose orientation is perpendicular to that of the temple. This was probably the altar of the temple.—Pontremoli and Collignon, *Pergame*, pp. 185 f., pls. IV, XI, fig. p. 184.

2. Priene, Sanctuary of Egyptian Gods. Third century. The altar in the court is 14.60 m. by 7.31 m. in plan. It is preserved in part above the socle; the total height of base, dado, and cornice is 1.79 m.; on the short (south) side there are seven steps, each 0.24-0.25 m. high, between antae. Since there are no remains which would indicate that a temple was placed upon this platform, it is probable that an altar was placed on it.—Wiegand and Schrader, *Priene*, pp. 164-169, figs. 157-163; Schede, *Die Ruinen von Priene*, p. 68.

3. Sparta, Altar on the Eurotas. Second century. Near the Eurotas is a platform 23.60 m. by 6.60 m. in plan and 1.90 m. high, oriented east-west, which consists of a rubble core surrounded by four courses of rough dressed ashlar which are topped by a sill course of dressed ashlar set in stretchers. The rubble core projects a little above the sill. Grounded in the rubble core is a cross wall of two courses between the two longitudinal walls; another L shaped wall abuts against this wall. On the west side of this platform is a narrow flight of eight steps not bonded with the altar. The excavator believes

that the body of some type of altar was placed on this platform, since no evidence for the existence of a temple has been found.—Dickins, *B.S.A.*, XII, 1905/6, pp. 295-302, figs. 1-3, pl. VII.

73. Altars of Undetermined Type. The following altars are not published with sufficient details, or they are so imperfectly preserved that they cannot be reconstructed or classified. Group A includes altars whose length is 3 m. to 6.50 m. Some of these were probably ceremonial altars, and others stepped monumental. Group B includes altars whose length is 7.30 m. to 8.76 m. The altars in the second group were probably small stepped monumental altars. It may be conjectured that many of the altars below, especially those of post-Classical date, combined elements which previously had been found only in ceremonial altars, with other elements previously found only in stepped monumental altars. Such was the case in § 46, Nos. 19, 21. Of the 24 altars below, not more than five can be of the fifth century, and about as many more are of the fourth century.

Group A, length 3 m. to 6.50 m.

1. Aliphera, Western Arcadia, Temple of Asklepios. The Hellenistic temple of Asklepios had a large altar dating from the fourth century.—*Arch. Anz.*, XLIX, 1934, cols. 156-158; *R. Et. Gr.*, XLIX, 1936, p. 153.

2. Athens, Temple of Ares. Early Roman period. Dinsmoor refers to H. A. Thompson as authority for the statement that east of the temple is a poros foundation for a substantial structure, conceivably an altar.—Dinsmoor, *Hesperia*, IX, 1940, pp. 7 f.

3. Athens, Sanctuary of Asklepios. Seventeen meters to the east of the fourth-century temple D (10.45 m. by 6.10 m. in plan) on the south slope of the Acropolis there is a rectangular foundation, 6 m. by 3.5 m. in plan.—Picard, *L'Acropole, Le plateau supérieur*, p. 79, fig. 74.

4-6. Delos, Altars before the Dodekatheon. Third century. (a) *Ca.* 9 m. east of the temple, on its axis and properly oriented, are the three lower courses of a solid rectangular structure of granite ashlar, 6.30 m. by 3.60 m. in plan. (b) Exactly to the south of the previous altar at a distance of 3.45 m. is another rectangular foundation of yellowish gneiss, 4.65 m. by 3 m. in plan. About two courses are preserved; originally it was narrower and was later

enlarged. (c) At the far end of the court near the entrance to the Agora of the Italians, on the axis of the Dodekatheon and properly oriented in regard to it, are the foundations of a structure 5.65 m. by 3.90 m. in plan, of massive blocks of gneiss, unworked except on the outer face. The interior is not preserved but was probably also of gneiss. On either side are smaller rectangular bases 2.10 m. by 1.16 m. in plan, probably statue bases. (d) On either side of altar (c) are the foundations of two smaller altars of the second half of the fourth century. The one to the north is a ceremonial altar. It bore a dedication to Athena, Zeus, Hera. Height including prothesis 1.09 m., length 2.95 m., width 1.46 m. at the prothesis. Four massive blocks formed the foundation, on which four slabs were placed vertically (the body of the altar was 2.505 m. by 1.06 m. in plan); of these, two are preserved, as is part of the covering slab, the end of which has a horn next to which is a barrier. The horn here seems to take the place of a volute. The altar to the south of altar (c) is in a ruinous condition and measures 3.60 m. by 2.40 m. in plan. Only the foundations are preserved, very imperfectly. To carry out the symmetrical effect, this altar also was probably ceremonial.—Vallois, *B.C.H.*, LIII, 1929: (a) p. 234; marked A on pl. X; (b) p. 234; pl. X; (c) pp. 228 f.; plan fig. 26 p. 224; marked C on pl. X; (d) pp. 225, 229; plan fig. 26 p. 224; marked *a* and *e* respectively on pl. X. Cf. Courby, *Délos*, V, plan fig. 2 following p. 2; Lapalus, *Délos*, XIX, plan fig. 2 following p. xii.

7. Delos, Sanctuary of the Dioscuroi. A foundation 6.50 m. by 3.50 m. is called a base by the excavator, Fougères, *B.C.H.*, XI, 1887, p. 248; it is possible, however, that it is an altar, as suggested by Robert, *B.C.H.*, LVIII, 1934, p. 187.

8. Delos, Eileithyiaion on Mt. Kynthos. Some marble blocks, some *in situ* and some nearby, are extant from a rectangular altar 4.15 m. by 2.40 m. in plan.—Plassart, *Délos*, XI, pp. 297 f., figs. 245, 246; fig. 239 p. 294.

9. Delos, Temple of Artemis. Late fifth century. Massive foundations of granite *ca.* 6 m. by 3 m. in plan, touching the porch, probably belonged to an altar.—Courby, *B.C.H.*, XLV, 1921, pp. 210-213, 215 note 1, plans pls. III/IV, V/VI, VII; cf. Courby, *Délos*, XII, pl. I, where the temple is called "Athena Monument".

[10.] Epidauros, Asklepieion. The large square foundation to the south of the temple (*ca.* 4 m. by 3 m. in plan) is considered by Dörpfeld, *Praktika*, 1884, pl. I, and by Cavvadias, *Praktika*, 1905, pp. 51-63, to be part of a large altar, perhaps in form the prototype of the colossal altar of Pergamon. This

is, however, unlikely, since the temple has an altar in its proper place (see § 71, No. 10). Cf. Lechat and Defrasse, *Epidaure*, plans pls. IX, X.

11. Kastraki, Mt. Ptoion, Upper Temple. End of fourth century. The altar is 3.40 m. by 2.40 m. in plan, 3.80 m. from the temple, slightly off the axis of the temple, but properly oriented in regard to the temple. Extant only is part of the lowest course on three sides. The temple is 9.41 m. wide.—Guillon, *B.C.H.*, LX, 1936, pp. 3-10, pl. III.

12. Karditsa, Mt. Ptoion, Temple of Apollo. About 333-247 B.C. Before the temple is a rectangular foundation 6.50 m. by 4 m. properly oriented but slightly off the axis of the temple.—Orlandos, *Arch. Delt.*, I, 1915, fig. 2 p. 95.

13. Magnesia on the Maeander, Temple of Zeus Sosipolis. To the west of the temple in the agora, at a distance of 8 m., was found a wall 4.50 m. long which may be the east face of an altar, but the exploration was not carried past the wall.—*Magnesia am Mäander*, p. 6, plan 3.

14. Paestum, Corinthian-Doric Temple in the Forum. In its first phase, of the early third century, this temple had the Etruscan tripartite division of the cella; the altar was 4.88 m. to the east of the temple and measured 4.88 m. by 2.44 m. in plan. In the second phase of the temple, in the first century B.C., Etruscan form was followed throughout, and the altar was placed on the steps of the temple.—Krauss and Herbig, *Der korinthisch-dorische Tempel am Forum von Paestum*, esp. pp. 5, 9, 25, 38-40, pls. 2, 11, 14.

15. Priene, Temple of Zeus Olympios. Third century. To the east of the temple (formerly called of Asklepios) at a distance of 8.90 m. is extant part of the lowest course of an ashlar altar *ca.* 3.80 m. by 3.20 m. in plan. The temple is 8.80 m. wide.—Wiegand and Schrader, *Priene*, p. 139, pls. XII, XIII; Schede, *Die Ruinen von Priene*, p. 58.

16. Priene, Agora. The colonnade about the agora was built in the latter part of the second century. To this date probably belongs an altar in the center of agora, 4.20 m. by 3.40 m. in plan, of which only part of the foundations are extant.—Wiegand and Schrader, *op. cit.*, p. 212, pls. XII, XIII; Schede, *op. cit.*, p. 56, fig. 56 p. 50.

16a. Priene, Sanctuary of Demeter and Kore. See § 85, No. 14.

17. Selinus, Altar east of Temple B. Second quarter of third century. Only the foundations are extant of a structure 3.70 m. square in plan, 6.50 m. east of temple B. Perhaps this altar is to be reconstructed like the altar of Anios at Delos (§ 46, No. 21). The temple is 5.40 m. wide.—Koldewey and Puchstein, *Griechische Tempel*, I, p. 93; II, pl. VII; Hulot and Fougères, *Sélinonte*, p. 236, illustration p. 237.

18. Thorikos, Theater. The theater was first built in the fifth or fourth century and enlarged in the fourth or third century. At a distance of *ca.* 29 m. from the temple there is a rectangular foundation *ca.* 4.10 m. by *ca.* 1.90 m., which may belong to an altar or a votive monument.—Dörpfeld and Reisch, *Das griechische Theater*, p. 111, fig. 43, p. 110; reference is there made to Miller and Cushing, *Papers of the American School*, 1888.

Group B, length 7.30 m. to 8.76 m.

19. Athens, Agora, Altar east of the Metroon. At a distance of 25 m. east of the Metroon, approximately on its axis, but not accurately oriented, is a rectangular foundation 8.76 m. by 5.43 m. with part of two upper courses on the east side, which carry four successively receding fasciae. Nearby was found a marble orthostate with rich upper and lower moldings which continued around one narrow side. The evidence afforded by clamp marks, assembly letters, and the style of the molding of the orthostate show that the altar was built toward the end of the fourth century and then moved to its present location in Hellenistic times, the date of the orthostate. The altar is reconstructed as having four steps on the west side, which were continued as fasciae on the other sides. The level of the prothesis was a platform *ca.* 8.30 m. by 4.20 m. On this was either a relatively small monolithic altar surrounded by a balustrade around three sides of the platform, or a larger ashlar altar, the orthostate belonging in the former case to the balustrade, or in the latter case to the altar.—Stillwell, *Hesperia*, II, 1933, pp. 140-148, figs. 23-30, pl. IV. Dörpfeld, *Alt-Athen und seine Agora*, I, p. 120; II, pl. X, considers this the Altar of the Twelve Gods.

20. Corinth, Sanctuary of Asklepios and Hygieia. Hellenistic. At a distance of 10 m. east of the temple, accurately oriented, and exactly on its longitudinal axis was an altar, the only traces of which today are rock cuttings, 8 m. by 1.50 m.—De Waele, *A.J.A.* XXXVII, 1933, p. 427, plan fig. 1, p. 417.

21. Eretria, Theater. Probably fourth century. At a distance of 13.65 m. east of the temple of Dionysus at the theater, there are ruinous remains of a foundation 7.30 m. by 4.20 m. in plan, not exactly on the axis of the temple nor accurately oriented.—Richardson, *A.J.A.*, first series, X, 1895, p. 329, pls. XVIII, XIX.

22. Megara, Precinct of Zeus Aphesios. East of the structural complex of the temple there was an ashlar structure *ca.* 7.30 m. by 4.50 m. in plan, of which are extant the base course and on the north, west, and south sides one course above it. This may be the altar of the temple.—Philios, *Eph. Arch.*, 1890, col. 40, marked H on pl. 4.3.

23. Notion (Port of Colophon), Temple of Athena. Hadrianic date. The temple is in a court surrounded on all sides by a colonnade whose orientation diverged 7° from the axis of the court. The orientation of the altar is intermediate. The temple is 16.12 m. wide, almost exactly the distance between the temple and the altar. Of the altar is extant the breccia core, about which was probably marble sheathing; the altar was originally 8.40 m. by 6.10 m. in plan.—Demangel and Laumonier, *B.C.H.*, XLVII, 1923, pp. 360-362, 366 f., fig. 13, plan pls. X/XI.

24. Rhamnous, Temple of Nemesis. *Ca.* 430. The temple is *ca.* 10.10 m. wide, and at a distance of 5.60 m. is a foundation of unequal ashlar of a structure 7.70 m. by 3.25 m. in plan. Perhaps certain architectural sculptures found at the site can be assigned to the altar.—Orlandos, *B.C.H.*, XLVIII, 1924, pp. 309 f., pl. VIII; the sculptures are illustrated in Society of the Dilettanti, *Unedited Antiquities of Attica*, Chapter VI, pl. 13.

74. Colossal Altars. These altars are distinguished from other types in that they are placed on platforms comparatively highly elevated and are usually surrounded by colonnades. This supporting structure by far exceeds the altar proper in architectural importance. The elevated supporting structure with colonnades thus is a distinct type of building. The altar proper of none of the colossal altars can be restored with certainty. All are of the late third century or later, and belonged to cities east of the Greek mainland. Nos. 2 and 3 belonged to deities which normally were chthonic. Average dimensions in plan are 20.7 m. by 16.3 m.

1. Cyzicus. A colossal altar, or perhaps merely a monumental altar, is represented on imperial coins as early as Trajan. It is also represented on

several stelai of Cyzicus found at Samothrace.—Hasluck, *Cyzicus*, p. 211; Kern, *Ath. Mitt.*, XVIII, 1893, p. 357.

2. Kos, Asklepieion. Hellenistic. Dimensions in plan 11.78 m. by 7.83 m. The platform was surrounded on the north, south, and west sides by a colonnade which supported a coffered ceiling. Perhaps an acroterion found comes from the corner of the body of the altar. The staircase was on the west, and perhaps originally did not extend beyond the east side of the platform, although later it did. The altar was probably in the center of a space which was left open to the sky.—Kos, I, Schazmann, *Asklepieion*, pp. 25-31, figs. 19-23, pls. 12-14, 49, 50; Herzog, *Jb. Oest. Arch. I*, VI, 1903, pp. 218 f.; *Jb. Arch. I*, XXXVIII/XXXIX, 1923/4, pp. 220, 244 f.

3. Magnesia on the Maeander, Temple of Artemis Leukophryene. Third century. The temple was rebuilt toward the end of the third or second century; it measures 67.50 m. by 41 m. in plan, and has the entrance at the west. Ca. 23 m. to the west is the main altar, 23.15 m. by 15.80 m. in plan. Many architectural sculptures from this altar are extant. The altar is reconstructed by von Gerkan with a staircase of 15 steps on the eastern side, leading to a broad platform, which was bordered by a colonnade on the eastern side, and by a wall on the other three sides. Although Artemis was worshipped here as a chthonic divinity, as attested by this unique example of a temple with an entrance to the west, the altar was quite elevated. It is problematical whether a distinctly chthonic type of altar was created here. The altar proper may have been against the west wall of the platform, and may have been a small monolithic or ceremonial altar, chthonic or olympian. According to Kohte's reconstruction, the platform was approached on either side by a staircase of two flights. There were rich sculptures on the exterior of the wall.—Kohte in *Magnesia am Mäander*, pp. 2-4, 91-99, figs. 93-95, pl. II; von Gerkan, *Arch. Anz.*, XXXVIII/XXXIX, 1923/4, cols. 343-348; *idem*, *Der Altar in Magnesia*; *idem*, *Der Altar des Artemis-Tempels in Magnesia am Mäander* (summarized in *R. Et. Gr.*, XLIV, 1931, pp. 56 f., fig. 2 p. 55).

4. Pergamon, Great Altar. Early second century. There are rich remains of the magnificent friezes and other sculptures of this altar, now in Moscow. Only the core of the platform is *in situ*. The platform measured 34.70 m. north-south by 34.60 m. east-west. On the west side was a staircase of twenty-four steps leading to the top of the platform, which was surrounded on three sides by a double colonnade consisting of a wall with a row of Ionic columns on either side. The colonnade extended over the wide antae which flank

the great staircase. In the center of this platform was probably another platform 17 m. by 12.75 m. in plan on which is reconstructed some type of altar, perhaps with its own prothesis. The great number of architectural fragments found belong obviously to a structure of considerable complexity.—Pontremoli and Collignon, *Pergame*, Chapter V, pp. 59-98, where reference is made to previous studies; Schrader, *Arch. Anz.*, XV, 1900, cols. 97-135; Winnefeld, *Pergamon*, III 2 (the Great Frieze); *Pergamon*, VII (the sculptures in the round); Schleif, *Jb. Arch. I.*, XLIX, 1934, fig. III, p. 143 (reconstruction); von Lörck, *Pergamon-Altar* (1940). Fig. 48.

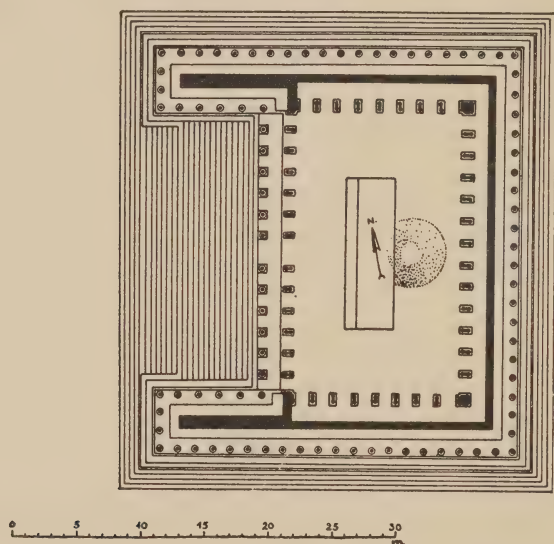


FIG. 48. Pergamon. Colossal altar, reconstructed plan.

(§ 74, No. 4)

5. Priene, Temple of Athena. Early second century. The temple of Athena is *ca.* 37 m. by 19.50 m. in plan; it was begun in the middle of the fourth century and completed not before the early part of the second century. At a distance of 12.35 m. east of the temple is the altar, which is 13.20 m. by 7.12 m. in plan and is preserved to a maximum height of 1.75 m. Its lateral faces are almost on the extension of the outer face of the cella walls. The architectural sculptures which are extant indicate a wide staircase on the west side of the altar between antae, leading to a platform. At the rear of this platform was a colonnade which extended to the west over the antae as a

double colonnade. The form of the altar proper on the platform cannot be ascertained.—Wiegand and Schrader, *Priene*, pp. 120-126, figs. 92-98; Schede, *Die Ruinen von Priene*, pp. 24-37; *Unedited Antiquities of Ionia* (Society of the Dilettanti), IV, p. III; von Gerkan, *Bonner Jahrbücher*, CXXIX, 1924, pp. 15-35, pls. I-III (reconstruction of the altar).

75. Ground Altars. The two definite examples of ground altars in this period are certainly chthonic (Nos. 1, 16).

1. Athens, Precinct of Hecate and Artemis, Cemetery by the Eridanos. In the court is a rectangular foundation of limestone ashlar topped by bricks. It is 0.17 m. high, and 1.53 m. by 1.48 m. in plan. On the south side is a small addition to the foundation, which the excavator considered a step serv-



FIG. 49. Selinus. Precinct of Zeus Meilichios. Double ground altar.
(§ 75, No. 16)

ing as a platform. Since this altar, however, is a chthonic altar, it is probably not a prothesis, but the base of some small votive monument. In the center is a marble omphalos (probably from a marble hydria) 0.40 m. high and 0.45 m. in diameter. The omphalos shows traces of burning.—Brueckner, *Der Friedhof am Eridanos*, pp. 45 f., figs. 19-21; marked 30 on the map.

2-14. Athens, North Slope of the Acropolis, Sanctuary of Eros and Aphrodite. About 13 small platforms made of fist-size stones were found before rock-cut niches; some had a stone on them, and some had a low bench behind them. It is doubtful whether these are altars.—Broneer, *Hesperia*, II, 1933, p. 347; IV, 1935, pp. 118-120.

15(?). Delos, Sanctuary of the Archegesion. See § 85, No. 4.

16. Selinus, Precinct of Zeus Meilichios. Double ground altar. See § 52, Nos. 6, 7. Fig. 49.

76. Masoned Well Altars. Nine examples of well altars are known in this period (cf. §§ 35, 85). Seven are masoned and two are monolithic, the latter type appearing first after Classical times. The average external diameter, both types being considered together, is 2.6 m. with extremes at 1.40 m. and 8.40 m. Average height is 1.7 m. Of special interest are two well altars at Delos (Nos. 4, 5), in which the circle of the wall is not completed, but instead an opening is left: the priest evidently entered here and performed the actual sacrifice on a small structure inside the well altar. With the exception of the monolithic well altar in the Tholos at Delphi (§ 77, No. 3), all the examples are probably or certainly chthonic.

1. Amyklai, Laconia. Remains of a circular stepped structure in eight levels (diameter at base *ca.* 8.40 m., restored total height 2.50 m.) was found associated with ashes and burnt bones, west of the Throne of Apollo. The remains have been interpreted as a mere platform, carrying an ash altar at the top. But only if this structure is restored as a chthonic well altar with a stepped profile, can it fit in with any type of Greek structure known. Although this altar is not mentioned by Pausanias, x, 18-19, it is natural to assume that it was dedicated to Hyakinthos. It appears to date in Hellenistic times. The site was occupied from the Late Mycenaean period onward.—Fiechter, *Jahrb. Arch. I.*, XXXIII, 1918, pp. 162-165, fig. 36 (restoration), fig. 2 p. 108, fig. 53 p. 53; Tsountas, *Eph. Arch.*, 1892, cols. 1-18; Evans, *J.H.S.*, XXI, 1901, p. 120. For similar stepped well altars, see § 35, Nos. 2, 4.

[2.] Athens, Asklepieion. See § 85, No. 2.

3. Delos, Kabeirion. Second century. The altar had a circular rubble foundation (1.70-1.40 m. high, 2.85 m. in diameter) with the foundation of a rectangular rubble platform (1.50-1.40 m. high and 1.70 m. by 1.60 m. in plan) built on the east side. Four courses of dressed stone formed the altar, which was 1.78 m. high, 1.60 in exterior diameter and 1.12 m. in interior diameter. The rectangular foundation carried an ashlar platform, and some steps were placed on it, against the altar.—Chapouthier, *Délos*, XVI, pp. 43-56, plans pp. 2, 3, 83-86, pl. II.

4, 5. Delos. Two masoned well altars dating *ca.* 400 (one completely preserved) are of singular form in having an opening in the wall from the foundation up. (a) The larger and better preserved altar carries a dedication

by the Athenian family of the Pyrrhakidai. It is situated near the southeast corner of the Tetrakon Agora, north of the Byzantine Church, and consists of three courses (total height 0.982 m.) above a crude foundation of gneiss slabs and blocks. Each of the upper courses consists of four blocks, joined by swallow-tail clamps. The exterior diameter is 2.20 m., the interior diameter *ca.* 1.60 m. The opening is *ca.* 0.60 m. wide. Originally part of the foundation was visible, but when the level of the court was raised, it abutted approximately against the middle of the altar. Inside the altar, in the south-east part, opposite the opening (which was in the northwest), a small

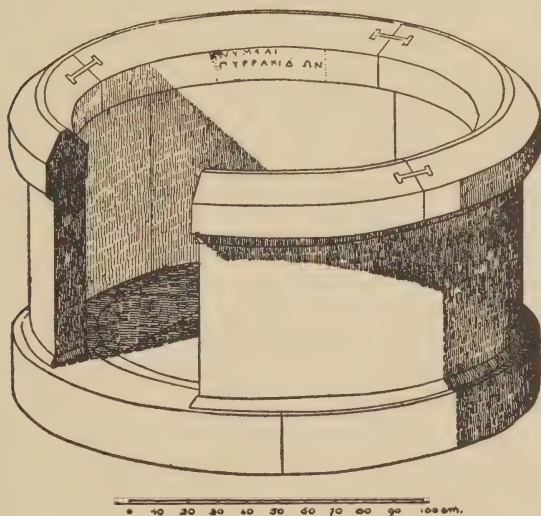


FIG. 50. Delos. Masoned well altar with entrance.

(§ 76, No. 4)

rectangle of upright gneiss slabs appears to have existed, although the slabs were not found in their original position. Above the foundation were found ashes, carbonized wood fragments and carbonized bones from small animals. Below the foundation similar remains were found "to a great depth" down to the virgin soil, and all about the altar. (b) The second monument, also epigraphically identified as dedicated by the Pyrrhakidai to the Nymphs, is situated north of the Kabeirion, east of Serapeion A. It is of very similar construction, except that there probably was no paving in the interior, the inside face of the wall was not carefully finished, and H-clamps were used. Only the lowest course above the foundation is extant *in situ*. From this and

other blocks recovered it is clear that the original height was 0.983 m., the exterior diameter was 1.775 m., the interior diameter was *ca.* 1.20 m., and the opening *ca.* 0.60 m. wide.—Roussel, *B.C.H.*, LIII, 1929, pp. 167-176, figs. 1-7, pl. V. Fig. 50.

6. Eleusis. A cylindrical masoned altar similar to the ones at Akragas is mentioned by Chapouthier, *Délos*, XVI, pp. 54 f., where reference is made to Kourouniotes, *Odhigos tis Elefsinos*, pp. 16 f.

7. Megara, Temple of Zeus Aphesios. To the east of the temple is the incomplete base course of a circular structure, consisting of five stones. The diameter is 2.75 m. This is evidently a well altar. That Zeus was here worshipped as a chthonic deity is clear from the existence of the five sacrificial pits described below, § 85, Nos. 8-12.—Philios, *Eph. Arch.*, 1890, p. 40, marked K on pl. 4.3.

8. Thasos, Sanctuary of Poseidon. Extant from a well altar is the base course (resting on the euthynteria at two points), one course of the dado, and several blocks not *in situ* from two higher courses. The diameter of the base is 1.56 m., and the minimum total height below the cornice is 0.985 m. The interior of the altar was filled, or more probably partly filled, with unshaped stones. On the west side a slightly irregular slab of gneiss *ca.* 1.10 m. long projects *ca.* 0.30 m. from the base. Though it was evidently intended as a standing place for the officiating priest, it is not to be considered a prothesis in the ritualistic sense of the word. Next to this altar was a ceremonial altar in antis: § 70, No. 5; cf. § 85.—Bon and Seyrig, *B.C.H.*, LIII, 1929, pp. 328-330, plan and elevation fig. 6 p. 329; cf. *B.C.H.*, XLIX, 1925, fig. 5 p. 465.

77. Monolithic Well Altars (cf. §§ 35, 85).

1. Delos, Antron of Apollo on Mt. Kynthos. Before the entrance of the antron at a distance of 7 m. was a circular altar consisting of two superimposed marble rings on a substructure of stones. Total height, 1.45 m.; external diameter, 1.90 m.—Plassart, *Délos*, XI, p. 245, figs. 187-188, 198-201, 204, 205, pl. VI.

2. Delphi, from the Center of the Tholos. Now in the museum (reconstructed and rebuilt). Hellenistic. Large marble altar on octagonal plinth inserted in the pavement, with relief of graceful female figures in two's attaching fillets to a laurel-leaf garland above them, which encircles the altar below the upper molding. Height 1.10 m., external diameter at base 1.40 m.

Interior hollowed out roughly; thickness of walls 0.17 m. at upper half of altar; the cavity is larger below, and extends through the bottom. The identification of this building as a prytaneion indicates that this altar took the place of the hearth in private homes (cf. § 81).²⁵ But it is doubtful that it is to be considered as a definitely chthonic type.—Bourguet, *Les ruines de Delphes*, pp. 323-326, fig. 113 p. 325; *Fouilles de Delphes*, IV, *Monuments figurés, Sculpture*, Vol. I (plates), pl. LXXVII; Pomtow, *Klio*, XII, 1912, pp. 205-207, figs. 32 (pl. VI), 31 (p. 204), pls. I-IV.

78. Hollow Ceremonial Altars. All the examples of this class are chthonic, as in the earlier period (§ 50).

1. Alexandria, Serapeion. A rectangular altar, consisting of two superimposed blocks, with no base but with a rectangular depression on the top surface. Painted dedication to King Ptolemy.—Breccia, *Catal. du Musée d'Alexandrie, Iscrizioni greche e latine*, p. 3, No. 6, pl. II; Schreiber, *Bildniss Alexanders d. Grossen*, p. 251, fig. 29; F. Chapouthier, *Délos*, XVI, p. 54, fig. 75.

2. Athens, Acropolis, North Porch of the Erechtheum. Pausanias, I, xxvi, 6, mentions "before the entrance" an altar of Zeus Hypatos, where the sacrificial offerings consisted of cakes. The position of this altar may be placed in the southeast corner of the north portico, where an opening in the pavement exists below an opening in the roof. On the other hand, the altar of Poseidon mentioned by Pausanias, I, xxvii, 2, may have been placed here. In the former case, three groups of fissures in the rock below the opening may be the mark of the thunderbolt of Zeus, and in the latter, the mark of the trident of Poseidon. The form of the altar seems to have been square, since the opening in the pavement was square or rectangular, with maximum dimensions 1.70 m. by 1.20 m. The exact form of the altar cannot be certainly determined, though Paton has offered a reconstruction from specifications relating to an Altar of the Sacrificer mentioned in an inscription.—Paton, *Erechtheum*, I, pp. 104-109 (the marks in the rock and the reconstruction of the altar); p. 318 (reconstruction); p. 490 (identification); cf. pp. 89-96 (the opening in the roof); p. 290, II, II, col. I, ll. 77-80 (the inscription); cf. Elderkin, *Hesperia*, X, 1941, pp. 113 f.

²⁵ On Hellenic round buildings used for a sacred fire, see Bulle, *Orcho-menos*, I (Abh. Bayer. Akad., Philos.-Philolog. Kl., XXIV, 1906), pp. 43 f.; F. Robert, *Thymélé*, pp. 365-422, both with further references.

3. Eleusis. Near the northwest corner of the Temple of Artemis Propylaia and Father Poseidon, large poros slabs enclosed a rectangular unpaved area in the center of which was a hollow rectangular altar of brick, square in plan. It has a projection to support an iron grate, and channels on the inner face of the altar to help form a draft. It is of Roman date, built over the remains of an earlier structure.—Kourouniotes, *Eleusis*, pp. 40 f., map.

79. Low Monumental Altars (cf. § 47).

1. Megalopolis. About 38.5 m. to the west of the northwest wall of the Thersilion is a triglyph altar measuring 36 ft. 3 in. by 6 ft. 5 in. in plan. Over a base course of ashlar is a frieze of triglyphs and metopes formed by upright slabs (2 ft. 10 in. high), each consisting of a triglyph and a metope. The long sides had 8 metopes and nine triglyphs, and the short sides had a single metope between two triglyphs. The interior of the altar was partly or entirely filled with pebbles. Possibly another course lay over the triglyphs but that is not inherently probable, unless the course consisted of flat covering slabs. The altar is parallel to the north-south wall of the Thersilion, and therefore may be considered not earlier than the Thersilion, which dates *ca.* 370.—J.H.S., *Supplementary Papers*, I, Gardner and Others, *Excavations at Megalopolis*, pp. 51 f., fig. 44; plan V; cf. Payne, *Perachora*, p. 91. Fig. 51.

2. Perachora, Temple of Hera Akraia. On the pebble pavement in front of the sixth-century temple of Hera Akraia at Perachora, at a distance of *ca.* 14 m. from the temple, are the remains of a low triglyph altar 2.062 m. wide, 1.965 m. high, and probably over 5 m. long, which dates in the late fifth or early fourth century. Most of the north side is preserved, on which there are three triglyphs and three metopes. The triglyphs present certain odd details, but need not be discussed here. The interior of the altar is filled with rubble, which, however, did not reach the height of the outer wall, as can be seen from the traces of fire extant on the stones. At the south end there was a drainage channel, evidently to drain off the blood or the scrubbing water.—Payne, *Perachora*, pp. 89-91, pls. 6, 130, 138 f.; cf. pp. 27-30. Fig. 52.

This altar lies exactly south of the entrance of the ninth-century apsidal temple, which faced east. The altar was thus near the southeast angle of the temple, and it cut through Helladic and geometric strata. It is clear that this altar is placed over a much simpler ninth- or eighth-century altar, which may have been preserved until the fifth century, but which probably was succeeded by another altar antedating the triglyph

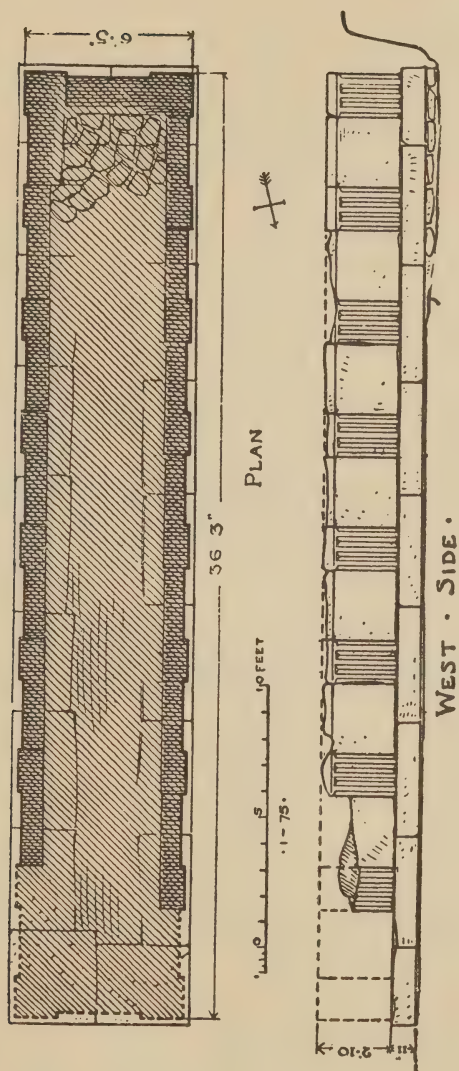


FIG. 51. Megalopolis. Low monumental altar.
(§ 79, No. 1)

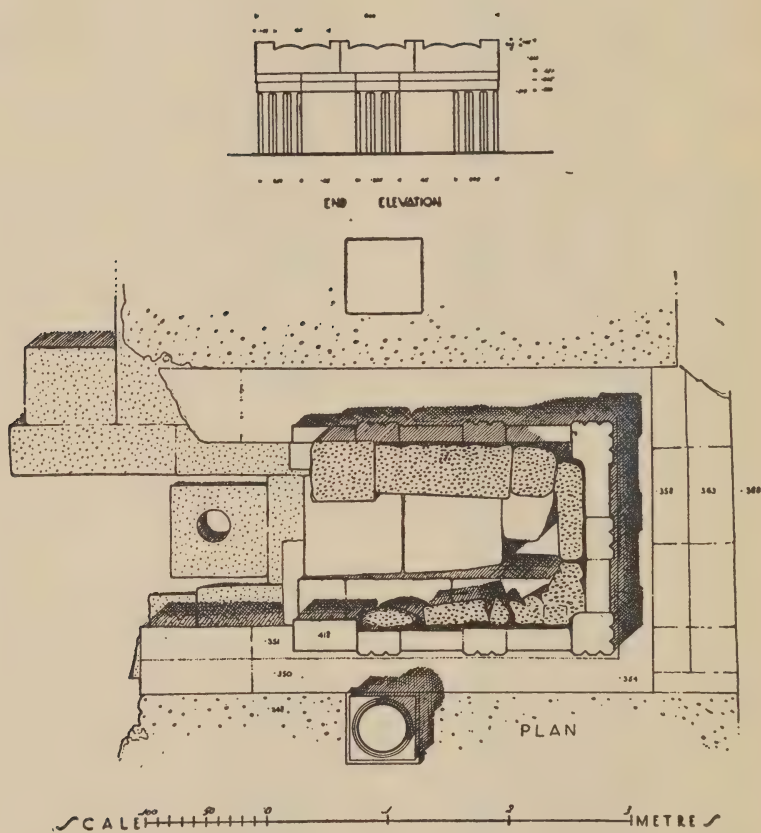


FIG. 52. Perachora, Temple of Hera Akraia. Low monumental altar.
(§ 79, No. 2)

altar. It is possible that the ninth-century temple had a hearth altar, that this was removed outside the temple, and that the triglyph altar derives its structural form by modification of the form of the old hearth altar. The triglyph altar has the form of a hollow ceremonial altar, both in having no prothesis and in having a depression in the top. The form of the altar suggests also that here Hera was worshipped as a chthonic divinity.

3, 4. Pergamon, Precinct of Demeter. Third century and Roman Imperial period. The altar is located *ca.* 5 m. east of the small temple of Demeter, which is 7.95 m. wide at the later stylobate. Extant of the altar are the foundations and parts of the base and prothesis course; of the body of the altar extant are parts of the separate course which carried the foot-molding, several orthostates, and a crowning slab; and an interesting volute element which extended beyond the altar at one of the four corners (cf. § 61, No. 93). The foundation course is 8.60 m. by 4.50 m. in plan, the base and prothesis course is *ca.* 7.50 m. by 3.75 m. in plan, 0.35 m. high, and carries a step 0.35 m. wide on the eastern side and 0.87 m. wide on the side toward the temple. The body of the altar is 6.90 m. by 2.27 m. in plan. Total height above the prothesis (excluding volute), *ca.* 0.95 m. The blocks were clamped and doweled together. In the third century the altar was of trachyte and carried on the orthostate a dedication of Philetairos and Eumenes to Demeter. At the time of Antoninus Pius or later a marble rebuilding seems to have taken place. This altar does not conform exactly to the normal form of a low monumental altar, in that it had a prothesis. But since a chthonic altar is to be expected at a temple of Demeter, the prothesis here must have no ritual significance, but only a functional purpose.—Dörpfeld, *Ath. Mitt.*, XXXV, 1910, pp. 374-379, figs. 6, 7, pls. XV, XVII; cf. p. 438, No. 23 (the inscription); for the volute, cf. Studniczka, *Jahrb. Arch. I.*, XXVI, 1911, pp. 70-72, fig. 14, where parallels cited, and discussion.

5. Sparta, Temple of Artemis Orthia. For the Roman altar, see § 47, No. 1.

80. Primitive Altars. Hearth altars, ground altars, ash altars, log pyres, stone heaps, earthen mounds, sacrificial pits, and rock-cut altars may be called collectively Primitive Altars, because of their simplicity of form and, excepting certain masoned sacrificial pits and rock-cut altars, because of their crudeness of construction. These types are treated in § 75

and the following sections. They were consciously retained throughout the Hellenic era in a primitive or rustic form: natural sacrificial pits and rock-cut altars were especially appropriate for rustic precincts; ash altars suggested great antiquity; and log pyres, stone heaps, and earthen mounds were suitable for temporary altars. The appearance of the last four types is known only from literature and representations in art.

81. Hearth Altars. No post-archaic hearth altar has been preserved from a temple (but see No. 1). The only extant hearth altar occurs in the prytaneion of Lato (No. 2). Simple fires, with no structural elements, located in the open, and definitely chthonic in character, are grouped separately under sacrificial pyres (§ 83). A monolithic cylindrical well altar was evidently used as a hearth altar in the Tholos at Delphi (§ 77, No. 2). See § 34 for the earlier examples.

1. Kos. The existence of some kind of a hearth altar in the temple of Hera at Kos is attested in a lengthy inscription of a sacrificial calendar, dated in the fourth or early third century.—Hicks, *J.H.S.*, IX, 1888, pp. 327-331 (pfg. P 1, ll. 6-9).

2. Lato, Crete. Early Hellenistic. A special room for the hearth altar was reserved in the prytaneion, with a wall bench in two tiers along the four walls. The altar is *ca.* 2.50 m. by 1.50 m. in plan and 0.45 m. high. It consists of upright slabs (over a foundation), about three to a side. In the middle of the western (short) side there appears to be a break in the masonry. A large terracotta stand was also found in the room. The prytaneion is so identified conjecturally.—Demargne, "Fouilles à Lato en Crète 1899-1900", *B.C.H.*, XXVII, 1903 (1904), pp. 216-219, fig. 4, plan pls. IV-V. Cf. Pomtow, *Klio*, XII, 1912, pp. 301-303, figs. 43, 44.

82. Ash Altars. Ash heaps, evidently mixed with earth and the victims' blood, were purposely built up over long periods of time from sacrifices at hallowed spots, in order to form an altar. No ash remains have survived, but in two cases masonry construction connected with ash altars have survived (Nos. 1 and 2).

1. Didyma, Temple of Apollo. The altar of Apollo is 7 m. east of the Didymaion, very slightly asymmetrical in regard to the axis of the temple.²⁶

²⁶ Wiegand, "Siebenter vorläufiger Bericht über Ausgrabungen in Milet und Didyma", pp. 41-43, *Berl. Abhandl.*, 1911; *idem*, *Didyma*, I, text, pp.

Evidently no signs of ashes were found, the only remains being the lowest course of a limestone wall, which formed a complete circle with an entrance on the east and west sides. The diameter of the circle is 7.89 m. and its circumference is 24.80 m., which is 80 Olympic feet, or 45 feet less than the circumference of the altar of Zeus at Olympia (No. 3). The original altar dates in the seventh century, since potsherds of the seventh and sixth centuries were found inside the circle, besides lead astragals and bones, but the structural remains appear to be of Classical or post-Classical date.

This altar is mentioned by Pausanias V, xiii, 11 (quoted below), as having been made by Herakles from the blood of the victims, and as being comparable to the Great Altar of Zeus at Olympia, but smaller. The reconstruction of this altar depends on the description by Pausanias, V, xiii, 8-11, of the Great Altar of Zeus at Olympia, and on a relief from the theater of Miletus. In the relief Apollo in superhuman stature is represented holding in his hand an animal resembling an elk; at his feet is an altar in the shape of a truncated cone, with flames on the top.²⁷ From this evidence, it is possible to form some concept of the appearance of the altar at Didyma. Originally it probably was a conical mound of blood, ash, and a liberal admixture of earth, about the foot of which a low wall was built. Later, it became greatly enlarged by the accretions of ash, blood, and perhaps earth, and natural causes hardened the mound into a solid mass. It is even possible that after the mound grew in size, some kind of prothysis was hewed out of the mound, to enable the sacrificer to place the offerings on the fire at the peak of the mound. Since sacrifices to Apollo were Olympian, the presence of a prothysis would be expected here. This prothysis could have been a small platform near the top of the altar, or a slab at the base of the mound; and the peak of the mound would probably take the place of an ordinary earthen mound.²⁸ Pausanias' statement to the effect that this altar was small in comparison to the one at Olympia, leads to the conclusion that the extant wall was not a retaining wall at the base of the mound, but a balustrade, located so as to leave a space between the mound and the balustrade. For an early bothros inside the temple, see § 85, No. 6a.

136-139; photos, pl. 227, F 635; drawings, pls. 79, Z 618; 80, Z 619; 84, Z 634.

²⁷ Kekulé von Stradonitz, *Sb. Berl.*, 1904, illustration p. 797.

²⁸ A somewhat different reconstruction (conforming more closely to the representation of the relief) with the wall not touching the mound is made by H. Schleif, *Jb. Arch. I.*, XLIX, 1934, p. 148, fig. 7.

2. Olympia, Heraion. See § 48, No. 7.

3. Olympia, Temple of Zeus. According to Pausanias, the altar of the Temple of Zeus at Olympia was between and before the Heraion and the Pelopion. Curiously, no remains of this altar have survived. Its reconstruction depends on the interpretation of the description of Pausanias, V, xiii, 8-11:

- 8 Ἔστι δὲ ὁ τοῦ Διὸς τοῦ Ὀλυμπίου βωμὸς ἴσον μὲν μάλιστα τοῦ Πελοπίου τε καὶ τοῦ ἱεροῦ τῆς Ἑρας ἀπέχων, προκείμενος μέντοι καὶ πρὸ ἀμφοτέρων. κατασκευασθῆναι δὲ αὐτόν οἱ μὲν ὑπὸ Ἑρακλέους τοῦ Ἰδαίου λέγουσιν, οἱ δὲ ὑπὸ ἡρώων τῶν ἐπιχωρίων γενεαῖς δύο ὕστερον τοῦ Ἑρακλέους. πεποιήται δὲ ἱερείων τῶν θυομένων τῷ Διὶ ἀπὸ τῆς τέφρας τῶν μηρῶν, καθάπερ γε καὶ ἐν Περγάμῳ· τέφρας γὰρ δὴ ἔστι καὶ τῇ Ἑρᾷ τῇ Σαμίᾳ βωμὸς οὐδὲν τι ἐπιφανέστερος ἢ ἐν τῇ χώρᾳ τῇ Ἀττικῇ ὡς αὐτοσχεδίας Ἀθηναῖοι καλοῦσιν ἐσχάρας.
- 9 τοῦ βωμοῦ δὲ τοῦ ἐν Ὀλυμπίᾳ κρηπίδος μὲν τῆς πρώτης, προθύσεως καλουμένης, πόδες πέντε καὶ εἴκοσι καὶ ἑκατόν ἐστι περίοδος, τοῦ δὲ ἐπὶ τῇ προθύσει περίμετρος ἑπακτοῦ πόδες δύο καὶ τριάκοντα· τὸ δὲ ὕψος τοῦ βωμοῦ τὸ σύμπαν ἐς δύο καὶ εἴκοσιν ἀνήκει πόδας. αὐτὰ μὲν δὴ τὰ ἱερεῖα ἐν μέρει τῷ κάτω, τῇ προθύσει, κατέστηκεν αὐτοῖς θύειν· τοὺς μηροὺς δὲ ἀναφέροντες
- 10 ἐς τοῦ βωμοῦ τὸ ὑψηλίστατον καθαγίζουσιν ἐνταῦθα. ἀναβασμοὶ δὲ ἐς μὲν τὴν προθύσιν ἀναγούσιν ἐξ ἑκατέρας τῆς πλευρᾶς λίθου πεποιημένοι· τὸ δὲ ἀπὸ τῆς προθύσεως ἐς τὸ ἄνω τοῦ βωμοῦ τέφρας παρέχεται καὶ ἀναβασμούς. . . . θύεται δὲ τῷ Διὶ καὶ ἄνευ τῆς πανηγύρεως ὑπὸ τε ἰδιωτῶν καὶ ἀνὰ
- 11 πᾶσαν ἡμέραν ὑπὸ Ἡλείων. κατ' ἔτος δὲ ἕκαστον φυλάξαντες οἱ μάντιες τὴν ἐνάτην ἐπὶ δέκα τοῦ Ἐλαφίου μηνὸς κομίζουσιν ἐκ τοῦ πρυτανείου τὴν τέφραν, φυράσαντες δὲ τῷ ὕδατι τοῦ Ἀλφειοῦ κονιῶσιν οὕτω τὸν βωμόν. ὑπὸ δὲ ἄλλου τὴν τέφραν ὕδατος οὐ μὴ ποτε ἐγγένηται. . . . ἔστι δὲ καὶ ἐν Διδύμοις τῶν Μιλησίων βωμὸς, ἐποιήθη δὲ ὑπὸ Ἑρακλέους τοῦ Θηβαίου, καθὰ οἱ Μιλήσιοι λέγουσιν, ἀπὸ τῶν ἱερείων τοῦ αἵματος· ἐς δὲ τὰ ὕστερα τὸ αἶμα τῶν θυμάτων οὐκ ἐς ὑπέρογκον ἠΰξηκεν αὐτὸν μέγεθος.

This passage has been discussed endlessly, and an extensive analysis need not be given here.²⁹ The obvious meaning of the passage seems to be that, except for the stone staircases at the lower level, the altar consisted of ashes and blood (probably with an admixture of earth), not of stone. The form of the altar would then have to be conical, and circular at its base; it is because of the circular outline of the base (not

²⁹ The more important discussions are summarized, and their reconstructions reproduced by Schleif, *Jb. Arch. I.*, XLIX, 1934, pp. 139, 153-156, who also gives his own reconstruction, figs. 8, 9, pp. 150 f. Rejection of Pausanias' testimony is in large measure due to doubts that an altar could be so formed. But the altar at Miletus was started only from the *blood*. For a full discussion of ashen altars, see Keramopoulos, *Thebaika*, pp. 330-331. For Schleif's reconstruction, see Fig. 53.

merely for rhetorical effect) that Pausanias states the circumference instead of the width or the diameter. He is evidently quoting the figures as recited by a local guide, but would not have retained them, if the altar were rectangular at its base. According to Pausanias, the circumference of the lower part was 37.50 m., the circumference of the upper part was 9.60 m., and the total height was 6.60 m. But according to these figures, the slope of the sides of the altar would have been impossibly steep, either for preservation of the altar against erosion, or for carrying

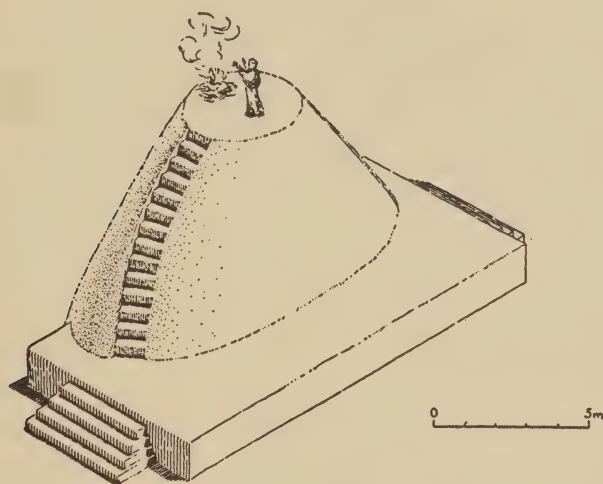


FIG. 53. Olympia. Ashen altar of Zeus, reconstruction by Schleif.
(§ 82, No. 3)

steps. We are, therefore, obliged to conclude that these measurements are, indeed, those given by a local guide, and that the height is exaggerated.

In accordance with these principles, a reconstruction is offered which, except for a 25% reduction of the height, does not reject testimony of Pausanias, and is not less probable than other reconstructions which greatly alter or strain the text (Fig. 54).³⁰ This is a form which could naturally result, if this altar came into being in the same manner

³⁰ The drawing here reproduced is due to the kindness of Mr. Julian Sacks. It is assumed that Pausanias was using the common short foot of 0.296 m.: cf. Frazer, *Pausanias' Description of Greece*, III, pp. 497 f.

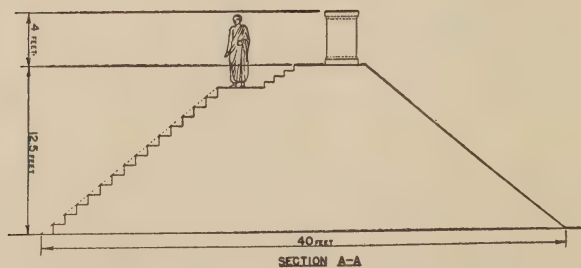
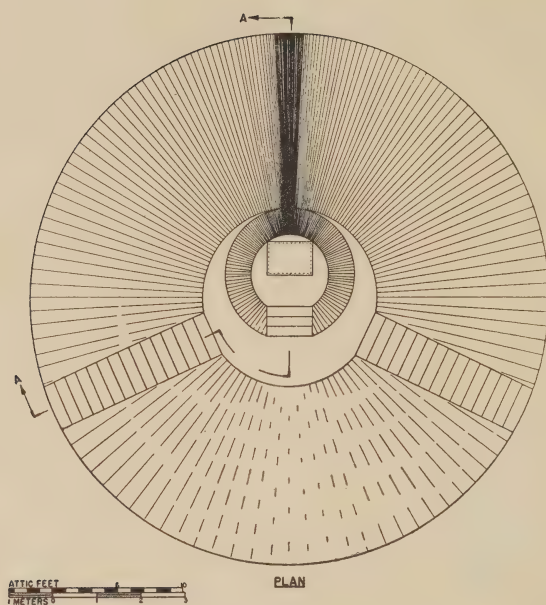


FIG. 54. Olympia. Ashen altar of Zeus, proposed reconstruction.
(§ 82, No. 3)

as the ash altar of Apollo (No. 1). The mass of the altar is not excessive: by Pausanias' time ashes had been accumulating for ten centuries from the ever-burning fire in the prytaneion, and from the fires of the "daily" sacrifices at the altar; to this should be added the blood and the remains of the thighs from the sacrificed animals, and mud from the Alpheios, which must have been used to make the mortar. The above dimensions give a volume of about 5,000 cubic ft. which implies accretions of $\frac{1}{2}$ cubic ft. per month.

The complete disappearance of any trace of the ashen material which composed the altar, may be explained by any one of three conjectures: the Alpheios may have carried away the ashes during floods, and when its course was changed; early Christians may have destroyed it; or later Christian inhabitants may have used the material as fertilizer.

83. Sacrificial Pyres. Simple pyres on the ground in the open air had a strong chthonic character, perhaps exclusively a chthonic character, since earthen mounds or some other crude elevation could conveniently serve for Olympian sacrifices. Chthonic pyres could not be held under a roof, for fear of contamination. This type is here distinguished structurally from ground altars, which had a permanent element, and is distinguished both structurally and ritually from hearth altars, which had permanent elements, were Olympian in character, and were situated inside buildings. Log pyres serving as altars are represented in vase paintings and mentioned in literature.³¹

1. Delos, Sanctuary of the Archegeion. The peribolos is 21 m. by 18 m., and partly paved. In the center is a semicircular hearth filled with ashes in which were bone fragments and potsherds. The hearth may have been located within a rectangular enclosure.—Picard, *Comptes rendus* (Académie des inscr. et belles-lettres), 1936, pp. 112 f.; F. Robert, *Thymélé*, pp. 191 f., plan fig. 6; cf. pp. 222-224; cf. *B. C. H.*, LXXX, 1946, pp. 582 ff.

2. Epidauros. Traces of fires and burnt bones in the court of Building E.—F. Robert, *Thymélé*, pp. 220-222, plan fig. 7, where further references.

3. Mt. Oite. Pyre of Herakles. See § 34.

³¹ For a general discussion, see F. Robert, *Thymélé*, pp. 191-193, 219-227, *et passim*. Ancient testimony is, for example, in Paus. IX, iii, 4; Theocr. XXVI, 3.

Vase Paintings

4. London. A representation by Python on a bell crater shows Alkmene seated on the altar of logs, and appealing to Zeus.—Trendall, *Paestan Pottery*, No. 107, pp. 57 f., pl. XV (B.M. F 149). Fig. 88.

5. Naples. A representation of human sacrifice at a log pyre identified by an inscription as the grave of Patroclus; a Greek pours a libation near (over) the altar.—*Monumenti dell' Istituto*, IX, 1871, pl. XXXII/III.

84. Earthen Mounds, Rude Stones, and Stone Heaps Used as Altars. From literary testimony it is known that earthen mounds were used as altars,³² and one has been reported from excavations. A rude stone or a stone heap also could serve as an altar, as is well known from literature³³ and from representations in art,³⁴ but with the probable exception of No. 1 (Dodona), no actual remains of such altars have been noted in excavation.

1. Dodona. Perhaps a unique example of an altar composed of rude stones was found inside a building of the sanctuary of Dodona, probably dating in the archaic period. It consists of three superimposed stones, with a circumference of 5 m.—Karapanos, *B.C.H.*, I, 1877, p. 250.

2. Arcadia, Peak of Mt. Lykaion. The altar of Lykaian Zeus is mentioned by Pausanias, VIII, xxxviii, 7, as being of earth. Excavations have disclosed remains of blackened earth containing burnt bones of small animals and stones, which formed an earthen mound still 30 m. in diameter and 1.50 m. high. No remains of human bones were found, to confirm ancient testimony of human sacrifices. Stepped bases of a column were found on either side of the altar. Finds prove that the altar had existed at least as early as the seventh century.—Kourouniotis, *Eph. Arch.*, 1904, cols. 153-214, esp. cols. 163-168; Mylonas, "The Altar of Lykaian Zeus" in *Classical Studies in Honor of William Abbott Oldfather*, pp. 122-133 (the bases are discussed p. 127, cf. here § 9 note 41; on pre-Hellenic mounds, see § 21 note 74a).

³² For an altar of unbaked bricks, see Paus. VI, xx, 11.

³³ E.g., Apoll. Rhodius, I, 1123; II, 696 f.; Paus. VII, xxii, 5.

³⁴ For additional references to rude stones used as altars, see Daremberg-Saglio, *Dict. d. Antiq.*, I, p. 347, note 6; cf. fig. 407; also P.-W., I, col. 1671 (vase paintings).

Vase Paintings

2a. London. A sixth-century vase painting shows the sacrifice of Polyxena over an earthen mound. See § 45.

3. London. A red-figured bell crater in London of *ca.* 430 shows an altar made of large boulders. It is approximately waist-high to a youth who is holding the divine portion over the fire on a pole. On the altar four courses of small pieces of wood laid lengthwise and crosswise, alternate; above, flames. On the wood is a ram's horn. The altar is before a column bearing a xoanon, and another figure, now lost, holds another pole with a divine portion on the end over the fire.—*J.H.S.*, IX, 1888, pp. 1-6, pl. I (colored); Schefold, *Jb. Arch. I.*, LII, 1937, p. 50, fig. 10 p. 49; C. H. Smith, *Catalogue of the Greek and Etruscan Vases (British Museum)*, III, No. E 494, pp. 300-302, pl. 16.

4. Leningrad. A pelike of *ca.* 390 shows an altar made of stones somewhat smaller than the previous one. It is approximately waist-high to the sacrificants. On top of the altar is a small leveled space on which the fire has been lit.—Schefold, *Untersuchungen zu den Kertscher Vasen*, figs. 70-72; *idem*, *Jb. Arch. I.*, LII, 1937, p. 50, fig. 11 p. 51. Fig. 89.

Representations in Relief

5-9. Athens. At least five "grotto reliefs" of a male god and the Nymphs show altars of different kinds, approximately knee-high to the deities: (a) stone heap; (b) stone heap; (c) stone heap; (d) simple boulder; (e) large stone, roughly squared. Classical period.—Svoronos, *Das Athener Nationalmuseum*: (a) pp. 440 f., No. 1447, pl. LXXIII; (b) No. 1779, pl. CXXX 2; (c) No. 1859, pl. XCVI; (d) pp. 450 f., No. 1448, pl. LXXIV; (e) No. 2008, pl. XCIX. Kastriotes, *op. cit.*, (b) p. 314; (c) p. 327. (b) Cook, *Zeus*, II 2, p. 1115, fig. 947.

85. **Sacrificial Pits.** All depressions in the earth used for sacrifices are included in this type.³⁵ This type is obviously chthonic, and

³⁵ For the trench dug near a grave to receive the blood washed off the hands of the sacrificers, cf. Jane Harrison, *Prolegomena*,² pp. 59 f.; cf. Athen. IX, 78 p. 409E ff. For round buildings enclosing a sacrificial pit, see F. Robert, *Thymélé*, pp. 339-364. On sacrificial pits, see also Bulle, *Orchomenos*, I (Abh. Bayer. Akad., Philos.-Philolog. Kl., XXIV, 1909), p. 31. Martin,

most of the examples are so identified positively. The distinction between sacrificial pits and well altars is chiefly structural, the former being rectangular or irregular in plan, and the latter circular in plan; in addition, with one or two exceptions, well altars are entirely above the ground. Sacrificial pits may be destined chiefly to receive the blood of the victims, and other libations, while well altars may be destined chiefly for the sacrificial fire. Sacrificial pits are of primitive aspect, and have the form of shallow or deep depressions in the earth or rock, made naturally or artificially, of regular or irregular form; there is one example of a natural fissure in the rock (No. 15) and one of a large cubical depression lined with ashlar walls (No. 14). The type is frequently associated with well, monolithic, or ceremonial altars, in which cases the pit very probably served to receive the blood, and the other altar served to burn the flesh, in a chthonic sacrifice in two parts³⁶ (Nos. 4-6a, 14, 23-28; § 70, No. 5; § 51, No. 4; § 34, No. 6). But in some cases it is impossible to distinguish between sacrificial pits and refuse pits. Nos. 14, 19, 26 carried a wooden cover. For the sake of comparison, five examples of sacred refuse deposits are also listed (Nos. 29-33); for other examples see Index, *s.v.* Deposit, sacred refuse.

1(?). Athens. In the Cave of Pan on the north slope of the Acropolis is an artificially made depression in the rock, of irregular shape and measuring 2.50 m. maximum diameter and 1.90-2.65 m. in depth. It is interpreted by Cavvadias as the grave of Erechtheus.—Cavvadias, *Eph. Arch.*, 1897, cols. 1-21, plan and section pl. 1. Keramopoullos, *Arch. Delt.*, XII, 1929, pp. 86-92, identifies it as the altar of Zeus Astrapaios, the god of lightning.

2. Athens, Asklepieion, on the south slope of the Acropolis. At the west end of the main stoa, directly north of the later temple of Asklepios, is an aediculum on four columns over a round pit, lined with masonry (diameter 2.70 m., depth 2.20 m.) which is older than the colonnade. The aediculum seems to be Hellenistic or Roman.—Versakis, *Arch. Eph.*, 1908, pp. 255-284; Allen and Caskey, "The East Stoa in the Asklepieum at Athens", *A.J.A.*, XV, 1911, pp. 32-42, pls. II, III, V; cf. Judeich, *Topographie von*

B.C.H., LXX, 1946, pp. 352-368, discusses subterranean chambers in temples, pertaining to offerings and oracles. On channels for the blood see § 87, No. 7.

³⁶ F. Robert, *Thymélé*, pp. 170-173; for apsidal buildings connected with chthonic worship, see *ibid.*, pp. 253-258.

Athen (second edition), pp. 320-326; F. Robert, *Thymélè*, pp. 233-240; Farnell, *Greek Hero Cults and Ideas of Immortality*, pp. 339 f.

3. Delos, Antron of Apollo on Mt. Kynthos. (a) Inside the antron was a depression in the rock *ca.* 1.20 m. by 0.90 m. in plan and 0.30 m. deep, full of stratified burnt coals. (b) At a distance of 3 m. from the entrance of the antron was another cavity, *ca.* 0.80 m. by 0.75 m. in plan and 0.35 m. deep, filled with burnt coals, ashes, and bones. Both pits, however, may be sacred refuse deposits.—Plassart, *Délos*, XI, pp. 241-243, fig. 188.

4. Delos, Sanctuary of Poseidon. Small depression lined with gneiss slabs, before a masoned altar. Width 0.66 m., depth 0.52 m.—F. Robert, *Thymélè*, p. 170; Vallois, *Délos*, II, Compl., p. 29, pl. III.

5. Delos, Sanctuary of Hera, Mt. Kynthos. Small depression lined with slabs, before a masoned altar. Depth 0.25 m.—Plassart, *Délos*, XI, p. 210; F. Robert, *Thymélè*, pp. 170 f.

6. Delos. Sanctuary of Herakles or Dionysus, Mt. Kynthos. Hellenistic. Before the entrance, at a distance of 3 m., rectangular depression. Depth 0.35 m., 0.75 m. square in plan. May be associated with the circular monument (well altar?) in the center of the court.—Plassart, *Délos*, XI, pp. 243-248; Vallois, *B.C.H.*, LV, 1931, pp. 274-276; F. Robert, *Thymélè*, p. 171.

6a. Didyma, Temple of Apollo. Pre-Persian. Inside the naïskos is a rectangular depression lined with ashlar slabs, 1.534 m. by 0.75 m. in plan, and 0.823 m. deep. Gold ornaments were found with a stratum of ashes near the pit. (For the ash altar of Apollo before the temple, see § 82, No. 1.)—Wiegand, *Didyma*, I, text pp. 128 f.; photos, pls. 186, F 721; 187, F 514; drawings, pls. 7, Z 145; 70, Z 512, Z 513; 79, Z 618, 599.

7. Eretria, Sanctuary of Isis. End of third century. Between the antae is a hollow rectangle, formed by four upright blocks; exterior measurements 1.40 m. in plan, interior measurements 0.65 m. square in plan. The blocks are embedded *ca.* 0.50 m. in the ground, and project above the ground only slightly.—Papadakis, *Arch. Delt.*, I, 1915, pp. 115-190, fig. 2 p. 116. Fig. 91.

7a, b. Lucania, Temple of Hera Argeia. Rectangular pits, ashlar masonry. (a) Fourth century. See § 48, No. 17. (b) Hellenistic.—*J.H.S.*, LVII, 1937, pp. 245 f., fig. 9.

8-12. Megara, Sanctuary of Zeus Aphesios. In Room A of the larger structural complex were found two depressions *ca.* 0.90 m. cube, full of ashes but with no bone fragments. In Room 9 there was a round shallow depression 1.90 m. in diameter paved with baked bricks. At the north side of it was an ashlar block 0.50 m. high and 0.10 m. square. *Ca.* 0.40 m. to the south of the depression was a round pit *ca.* 0.60 m. in diameter and 0.10 m. deep, which was connected with the pit by a conduit of baked bricks. In Room 10 was another depression *ca.* 0.60 m. in diameter and 0.13 m. deep, at the north side of which was an ashlar block *ca.* 0.50 m. high and *ca.* 0.50 m. by 0.25 m. in plan. The function of these pits is uncertain, but was probably sacrificial. For a well altar at this sanctuary, see § 76, No. 7.—Philios, *Eph. Arch.*, 1890, cols. 35-40, pl. 4.

13. Philippi. A doubtful example under the Macedonian Monument is a curiously shaped rock-cut pit with two further depressions in the side walls of the pit. (Cf. § 86, No. 4.)—*B.C.H.*, LXI, 1937, Chron. d. fouilles, pp. 465 f., fig. 29.

14. Priene, Sanctuary of Demeter and Kore. This sanctuary consists of an enclosed court with an irregular shrine of one large room, two small rooms, and a porch. A bench extends against the rear wall of the large room and partly along the side walls. It is constructed of ashlar faced with marble on the side and top. Cuttings in the marble covering-slab indicate that small statues were placed on it. Two marble tables similar to the one described in No. 15, except that the vertical slabs do not terminate in lions' paws and are provided with a raised border on the horizontal slab, stood before this bench. The total length of the bench, measured against the wall, is over 12 m., its height 1.23 m., and its width 1 m. At the west end of the court is a rectangular altar of ashlar construction measuring 4.40 m. east-west by 1.55 m. north-south, preserved to a height of 1 m. Near the temple is a pit almost square in plan (2.98 m. by 2.85 m.), 2 m. deep, with ashlar walls. On the east and west sides the walls project above the ground to form gables 0.60 m. high; a similar triangular block lies across the pit between the two gables. The markings on the gables and on this block show that the pit was covered with two wooden lids.^{36a} Though the pit had unfortunately been emptied of its contents at some earlier time, the numerous grotesque votive

^{36a} For a rectangular "pit for the refuse of sacrifices", entirely above ground and carrying a similar wooden covering[?] at the temple of Isis at Pompeii, see Mau-Kelsey, *Pompeii, Its Life and Art* (second edition), p. 171, figs. 78-80.

terraccottas found in the sanctuary show that there the goddesses were worshipped as fertility deities, obviously with a chthonic character.—Wiegand and Schrader, *Priene*, pp. 147-154, 163, figs. 119, 121-123; Schede, *Die Ruinen von Priene*, pp. 91-96, figs. 101, 107, 108.

15. Priene, Hieros Oikos. This precinct consists of three large rooms and several small ones about a court. In the northeast corner of the largest room is a bench built along the two walls. It extends *ca.* 6.60 m. against the east wall, 2.15 m. against the north wall; it is *ca.* 1.60 m. wide and *ca.* 1.20 m. high. It is constructed of ashlars faced with plaster. On the south side of the eastern branch, there is a narrow staircase of five steps and two similar staircases on the west side of the same branch flanking a marble offering table, which stood before a natural fissure in the rock floor. The table consists of a slab 1.57 m. by 1.95 m. resting on two upright slabs with vertical channels terminating in lions' paws carved on the front face. In another room, a similar table was found. The fissure is *ca.* 1.50 m. by 0.60 m. in plan and 1.50 m. deep. Chthonic sacrifices were obviously performed at this fissure. On the podium were found marble and terracotta statuettes. It is not known to what divinity this sanctuary was dedicated.—Wiegand and Schrader, *Priene*, pp. 172-178, figs. 166-170; Schede, *Die Ruinen von Priene*, pp. 107-109, fig. 123.

16. Priene, Sanctuary of Cybele. The sanctuary consists of a pentagonal court near the western gate, with no building. In the center of it was a pit filled with ashes, bone fragments, and potsherds. It is oriented exactly to the cardinal points of the compass, and is *ca.* 1 m. deep, and 1.50 m. square in plan. The east and south sides are cut from the rock, and on the other two sides it is enclosed by marble slabs.—Schede, *Die Ruinen von Priene*, pp. 102, 107; Wiegand and Schrader, *Priene*, pp. 171 f., fig. 165 p. 172.

17, 18. Samothrace, Kabeirion Sanctuary, New Temple (Marble Doric Temple). Third century. The rear (south) end of the cella is a semicircular apsis. (a) Before this was a low transverse wall, in the center of which was a large ashlar block (1.465 m. by 1.205 m. in plan, 0.36 m. thick) pierced by a vertical cavity, semicircular in horizontal section. The block rested on virgin earth. (b) Between the transverse wall and the apsis was a trapezoidal depression (about 1.50 m. deep and 2 m. by 2.50 m. in plan), partly lined with upright slabs. There seems to have been no communication between the opening of the stone block and the large depression.—

Conze, Hauser, Niemann, *Archaeologische Untersuchungen auf Samothrake*, I, pp. 20 f. (with discussion), 60 (description); pls. XI, XIV 1, XVII-XXI.

19, 20. Samothrace, Kabeirion Sanctuary, Old Temple. Middle of fourth century. The temple faces northwest. (a) Inside the cella, on the ground and on the longitudinal axis of the temple, is a shallow depression lined on the north, west, and south sides by ashlar blocks which are roughly rounded on the side toward the depression so as to leave a circular opening, and which rest on the native soil. These blocks are enclosed on the same three sides by more carefully finished blocks. Diameter of opening, *ca.* 0.75 m., overall dimensions *ca.* 2.60 m. square. The outer blocks evidently supported a wooden covering (cf. No. 14), and were added later. The inner blocks show signs of long wear. (b) Against the northwest side of a transverse wall in the temple, and on the longitudinal axis of the temple, is another shallow depression, formed in a similar manner, but all the blocks are rectangular, the inner blocks at a lower level than the outer blocks, and the depression is delimited on all four sides. The depression was *ca.* 0.27 m. deep, and *ca.* 0.95 m. by 0.44 m. in plan; it reached the virgin soil. Overall dimensions, *ca.* 1.60 m. by 1.35 m.—Conze, Hauser, Benndorf, *Neue archaeologische Untersuchungen auf Samothrake* (*Archaeolog. Untersuch. auf Samothr.*, II), pp. 21 f., 24, 101; pls. II, IV-VII.

21, 22. South Russia, Blisnitza, Taman. Two offering pits are mentioned, one a funnel-shaped opening in the ground under a slab with a covering, connected with pyres on which the dead were burned; the other pit also was a funnel-shaped opening in an altar-like construction.—Conze, Hauser, Niemann, *Archaeologische Untersuchungen auf Samothrake*, I, pp. 20 f., where reference to Stephani, *Compte-rendu de la commission impér. archéologique*, 1864, p. viii; 1865, pp. iv, 6 ff.; 1866, pp. 77, 81.

23(?). Stymphalia. Interior bothros may have some connection with an altar (?).—F. Robert, *Thymélé*, pp. 173, 381-383; Orlandos, *Praktika*, 1925, pp. 52 f., pl. I.

24. Thasos, Herakleion. See § 34, No. 11.

25. Thasos, Dionysion. Fourth century. Two rectangular altars, one in the form of a "rectangular bothros".—F. Robert, *Thymélé*, p. 173; *B.C.H.*, XLVII, 1923, Chron. d. fouilles, p. 538; *ibid.*, XLVIII 1924, p. 502.

26. Thebes, Sanctuary of the Kabeiroi. Fourth century. In an unroofed enclosure west of the cella is a pit of ashlar blocks, 1.80 m. by 2.10-2.20 m.

in plan, divided by a longitudinal wall. The walls extended a maximum of *ca.* 0.60 m. above the level of the ground, and carried a hip-backed wooden covering, as indicated by the markings in the stones and the gables at the two short ends. The structure probably belongs to the third temple, which dates in the fourth century. The southern half of the pit was filled with burnt goat bones, while the other half contained nothing of interest. It is probable that the former part of the pit served for the burning of the flesh, while the latter received the blood. (Remains of a structure east of the temple have been tentatively identified as those of a large altar.)—Wolters and Bruns, *Das Kabirenheiligtum bei Theben*, I, pp. 3, 15-20 (by Dörpfeld), pls. 2, 3.

27(?). Thera, Temenos of Artemidoros. See § 86, Nos. 12, 13(c).

28. East Lokris. Rock-cut pit near altar. See § 86, No. 6.

Sacred Refuse Deposits

29. Cyprus, Soli, Temple A (of Aphrodite) at Cholades. Period 1, 250 B.C. to *ca.* 100 B.C. In front of the entrance to Room VII, before a levelling in the rock is a cavity cut into the rock, altar 145. It was filled with ashes, charcoal, and terracotta fragments. This appears to be a sacred refuse pit, perhaps belonging to an altar which may have been placed on the levelling.—*S.C.E.*, III, text, p. 1.

30. In this connection may be mentioned a number of amphorae containing bones, probably from sacrifices, found on Mt. Kynthos.—Plassart, *Délos*, XI, p. 142.

31. Selinus, Temple D. Deposit connected with the altar. See § 48, No. 10.

32. Thermos. Pithoi full of ashes and bones.—Sotiriades, *Eph. Arch.*, 1900, cols. 176-179, figs. 2, 3 (where also mention of places at which dark earth has been associated with the blood of sacrificed animals).

33. Lucania, Temple of Hera Argeia. See § 48, No. 17.

86. Rock-Cut Altars. Throughout Asia Minor large rock-cut altars were a common type of altar: they usually have the form of one or two thrones (a ledge with a high back) flanked by long ledges on

either side, and approached by a broad flight of stairs.³⁷ In Greece there are several examples of great rock-cut thrones, which seem to have been used as the throne of cult statues.³⁸ Rock-cut altars are rare in Greece, and appear to have reproduced masoned or monolithic types.³⁹ The dating is uncertain.

1, 2. Athens, Areopagus, Pnyx. Rock-cut bases of altars.—Judeich, *Topographie von Athen* (second edition), pp. 391-394; Curtius and Kaupert, *Atlas von Athen*, p. 26, pl. II.

3. Colophon. Fourth century. A rock-cut base at the south end of the Plateia may have carried an altar.—Holland, *Hesperia*, XIII, 1944, pp. 111 f., fig. 14.

4, 5. Fassiler, Misthia, Interior Asia Minor. Probably Christian date. (a) Rock-cut altar in the form of monolithic rectangular altar. Damaged above. Weathered. (b) Rock-cut altar with steps. Inscription.—Swoboda, Keil, and Knoll, *Denkmäler aus Lykaonien, Pamphylien, und Isaurien*, p. 16, fig. 13 (a); pp. 24 f., illustration (b).

6. East Lokris. A rock-cut altar and pit on the top of a huge boulder is reported, which was reached by a ladder and then by 12 steps cut in the rock. It was "a kind of exedra altar, with a low shelf cut in the stone". There was also a deep circular depression cut in the rock, which was rounded at the bottom. The purpose of the depression is doubtful. The orientation of

³⁷ For examples of rock-cut altars see Wood, *Discoveries at Ephesus*, p. 99 (Ephesus); E. Curtius, *Beiträge zur Geschichte und Topographie Kleinasiens*, p. 35, pls. I (J), II (Ephesus); Leonhard, *Paphlagonia*, pp. 7, 233, pl. XVII; Ramsay, *J.H.S.*, X, 1889, pp. 167-174, figs. 20-24 (five Phrygian altars); *J.H.S.*, III (N.D.), pp. 12-14, with two illustrations, p. 42 (Phrygia); Ramsay, *J.H.S.*, I (N.D.), pp. 69 f., figs. 4, 5 (on Mt. Sipylus); in general, see Körte, *Ath. Mitt.*, XXIII, 1898, p. 118; Galling, *Der Altar in den Kulturen des alten Orients*, pp. 100 f., pl. 16, Nos. 15-17; F. Hiller von Gaertringen, *Thera*, III, p. 64.

³⁸ A rock-cut throne at Phalasarna, Crete, is discussed by Studniczka, *Jb. Arch.* I., XXVI, 1911, p. 85, fig. 20; one at Thasos is referred to by *Arch. Anz.*, LI, 1936, col. 152; rock-cut thrones are also mentioned by Ussing, *Oversigt K. Danske Videnskabernes Selskabs*, 1900, p. 285; cf. Reichel, *Ueber vorhellenischen Götterkulte*, p. 40; see above, § 30, note 1.

³⁹ A rock-cut altar at Hermione is mentioned by Paus. II, xxxii, 7. Cf. Lolling, *Ath. Mitt.*, III, 1878, p. 154.

the altar is almost exactly to the cardinal points of the compass.—Oldfather, *A.J.A.*, XLIV, 1940, p. 108.

7-9. Philippi. There is mentioned there, as sacred to Bendis, "un dispositif de bassins et de rigoles taillés dans le roc, sans doute aménagé pour des sacrifices et retrouvé à Philippes en deux endroits, dans les escarpements de l'acropole, non loin d'images de la déesse . . .".—Collart, *Philippes*, I, p. 434, II, pl. LXXIX 2; cf. *R. Hist. Rel.*, LXXXVI, 1922, pl. I.

10. Samos, rock-cut altars in an ancient cemetery. Throughout the cemetery were distributed rock-cut altars and levellings in the rock. Sixth century.—*Arch. Anz.*, XLVIII, 1935, col. 256.

11. Thasos, Herakleion. See § 34, No. 11.

12, 13. Thera, Temenos of Artemidoros. Third century. Several reliefs and platforms were cut in the rock of the hillside, and also the front and top of two ceremonial altars with inscriptions. (a) The altar of the Dioskouroi is a level depression *ca.* 0.75 m. by 0.50 m., before which the rock is levelled vertically, so as to form the front side of an altar *ca.* 0.75 m. high. (b) The altar of Homonoia is similarly constructed, but with greater care. The upper surface is *ca.* 1.80 m. by 1 m., and has a square depression; the front side has about the same dimensions. (c) To the side of the altar of Homonoia is a dedication of an altar to the Samothracian gods. This inscription may or may not refer to an oval pit cut in the levelling of the rock before and to the side of the altar of Homonoia.—F. Hiller von Gaertringen, *Thera*, III, pp. 90-99, figs. 73-81; *I.G.* XII 3, pp. 422-428.

87. Sculptures from Altars. The sculptured architectural elements or ornamentation of masoned altars do not exhibit peculiar characteristics.⁴⁰ Besides the rich ornamentation and scenes on colossal altars, and the sculptured elements appertaining to altars described above, the following reliefs are of interest:

1. The Ludovisi and Boston Reliefs, which perhaps date in the middle of the fifth century, may be barriers from monumental altars.—Studniczka, *Jb. Arch.* I., XXVI, 1911, pp. 50-192, and Von Gerkan, "Untersuchungen am Ludovisischen und Bostoner Relief", *Jb. Oest. Arch.* I., XXV, 1929,

⁴⁰ Sculptures of altars are discussed by Picard, *Manuel d'archéologie, La sculpture*, I, pp. 409-420.

pp. 125-172, are the most complete studies; cf. also Caskey, "The Ludovisi Relief and its Companion Piece in Boston", *A.J.A.*, XXII, 1918, pp. 101-145, pls. IV, V; Flickinger, "The Ludovisi-Boston Altar Screen", *Arch. Eph.*, 1937, pp. 30-32; G. M. A. Richter, "The Subject of the Ludovisi and Boston Reliefs", *J.H.S.*, XL, 1920, pp. 113-123; Mrs. Hawes, *A.J.A.*, XXVI, 1922, pp. 278-306; Jean Colin, *Revue Archéologique*, XXV, 1946, pp. 23-42.

2. Eleusis. A large block with reliefs from Eleusis may belong to a monumental altar of Demeter.—Bötticher, "Altar der Demeter zu Eleusis", *Philologus*, XXV, 1867, pp. 13-42.

3. Lagina (near Stratonicea). A large number of reliefs from a frieze which is attributed to a monumental altar at Lagina are now at Constantinople.—Mendel, *Catalogue des Sculptures* (Mus. impér. ottom.), I, pp. 428-431 (history of the excavation), pp. 536-541 (the sculptures of the altar).

4. Epidauros. Two relief fragments from an altar. (a) Now at Athens. Cavvadias, *Arch. Eph.*, 1895, pp. 179-184, pl. 8. Svoronos, *Das Athener Nationalmuseum*, No. 1425, pls. LXVIII, CXXVI. (b) Giamalides, *Eph. Arch.*, 1911, pp. 174-177.

88. Offering Tables.⁴¹ Two types of offering tables occur in the post-archaic period: those with a level upper surface, and those with one or more depressions in the upper surface. Of the latter class only one (No. 1) is described here, since the type has been studied elsewhere.⁴²

1, 2. Aigina. (a) Slab 0.17 m. thick and 2.02 m. by 1.16 m. in plan: in the upper surface are eight rectangular depressions 0.45 m. by 0.52 m. in plan in two rows. On the front face is a fragmentary inscription of the middle of the fourth century, while on the back is a dedication in letters of about the time of Caracalla. (b) A similar slab, with shallow rectangular depressions.

⁴¹ A. Mischkowki, *Die heiligen Tische im Götterkultus der Griechen und Römer*, Diss. 1917, 43 pp. was not available; cf. P.-W., XV 1, cols. 937-947 s.v. "Mensa". Altars and offering tables differ functionally, but their religious significance is practically the same, since ordinary altars could be used for libations and food offerings; besides, there is no real religious difference between burnt flesh and other offerings; cf. Cook, *Zeus*, III 1, pp. 579 f.

⁴² Deonna, *B.C.H.*, LVIII, 1934, pp. 1-90 (summarized in *A.J.A.*, XL, 1936, pp. 356-360). On supports of offering tables see § 59, Nos. 17-21 (cylindrical); Bakalakis, *Hellenika Trapezophora*, 1948 (rectangular).

480-470 B.C.—(a) Welter, *Arch. Anz.*, LIII, 1938, cols. 21-23. (b) Karo, *Arch. Anz.*, XLVII, 1932, cols. 163 f., fig. 23.

3, 4. Athens, Dionysion Lenaion, Western Acropolis. A foundation of ashlar 3.10 m. square (partly preserved) in the center of the precinct shows traces of four (metal) supports of two successive tables of offerings. This was the only "altar" of the precinct. The date of the precinct is in the sixth century or earlier, to Hellenistic times. It is probable that the offering table parallels those dates.—Dörpfeld, *Atb. Mitt.*, XX, 1895, pp. 166 f., pl. IV; cf. p. 176.

5. Athens, Acropolis. Offering table of Athena Hygieia. See above, § 69, No. 3.

6. Attica, Near the Village Kakosialesi. Slab 0.08 m. thick and 2.31 m. by 1.00 m. The under side shows markings of two supports which held the slab. Dedication in letters of the early Empire.—Schmidt, *Atb. Mitt.*, V, 1880, pp. 116 f.

7-10. Priene. (a) Two offering tables in the Hieros Oikos. See § 85, No. 13. (b) Two offering tables in the sanctuary of Demeter and Kore. See § 85, No. 12.

11. Pergamon. A cylindrical stand, 0.725 m. high and *ca.* 0.40 m. in diameter, with a relief of an eagle grasping a thunderbolt, supported a circular slab which may have been an offering table.—*Pergamon*, VII 2, p. 340, No. 423.

12. Selinus. In the sixth-century Temple C (Heraion), there is a block 1.10 m. square, 1.30 m. from the rear wall of the adyton with a hole in the pavement near each corner of the block. It belonged to the original building of the temple, but approximately in the first century B.C. the space between the block and the wall was filled in with smaller stones. On this was a small pedestal. Evidently the block was the original pedestal of the statue, but when the statue was put near the wall, a table of offerings was placed over the block. (See § 36, No. 3, for the possible location of the sixth-century table of offerings.)—Hulot and Fougères, *Sélinonte*, pp. 261 f. (illustration p. 262 is inaccurate); Koldewey and Puchstein, *Griechische Tempel*, I, pp. 128 f.; II, pl. 18.

Miniature Offering Table

13. Thebes, Kabeirion. Of terracotta. Has form of low table with four legs. Height $1\frac{1}{2}$ in., length $4\frac{3}{8}$ in., width $2\frac{3}{8}$ in.—Cook, *Zeus*, III 1, p. 580, fig. 405 (with references to Oriental parallels).

Representation in Relief

14. Athens, Asklepieion. Now in the National Museum, Athens. A small square offering table, evidently of metal, is portrayed in a relief depicting a scene of offering. On the offering table are fruits and other objects.—Svoronos, *Das athener Nationalmuseum*, pp. 254-256, No. 1335, pl. XXXVI 1.

89. Wall Benches. In the interior of Greek temples there is frequently found a low bench-like wall against the cella wall, which served as an offering stand or a general utility table. This type of structure is here called a wall bench. It appears that this element is a survival from the pre-Hellenic sanctuaries (see § 33). The following examples may be cited:

1. Cyprus, Vouni, Temple of Apollo, Hellenistic or Roman. In the rear corner of the naos there is a square structure *ca.* 2.30 m. by 1.45 m. in plan. This is probably not an altar, as the excavator believes.—Ohnefalsch-Richter, *Kypros, The Bible and Homer*, I, pp. 2-5; II, pl. V; cf. pls. XL-XLIII; *idem*, *Die antiken Kultusstätten auf Kypros*, p. 3, pl. V.

2. Priene, Hieros Oikos. See § 85, No. 15.

3. Priene, Sanctuary of Demeter and Kore. See § 85, No. 14.

Four examples from the temples at Soli at Cholades in Cyprus date 100 A.D. to 350 A.D., and seem to be foreign importations in temples dedicated to foreign gods.

4. Temple E, Altar 155, Northern Cella (of Canopus). Built against the full length of the rear wall of the cella, 2.30 m. by 0.80 m. in plan, preserved to a height of 1 m. Ashlar and rubble construction with a gypsum revetment.—S.C.E., III, text, pp. 455 f., plan XXXVI section VI, plan XXXIX section B-B, fig. 245.

5. Temple E, Altar 151, Central Cella (of Serapis). Built against the rear wall, does not extend the full length; 4.30 m. by 1.60 m. in plan, of ashlars, very little preserved *in situ*.—*S.C.E.*, III, text, p. 454, plan XXXVI section VII.

6. Temple E, Altar 156, Southern Cella (of Eros?). A wide bench of rubble against the full length of the rear wall (3.90 m. by 1.90 m. in plan), extended along the remaining length of side walls; preserved to a maximum height of 0.70 m.—*S.C.E.*, III, text, p. 456, plan XXXVI section IX; cf. plan XXXVI section VIII.

7. Temple C (probably of Isis), Altar 149. In rear corner of the cella, of rubble, only slightly preserved, width 0.90 m.—*S.C.E.*, III, text, p. 454.

90. Chronological Note. The Neolithic Age in the lands surrounding the Aegean ended about 3000 B.C., or more precisely, it ended about two centuries before this date in Crete, and about two to four centuries after this date in Macedonia, with intermediate dates in the intervening areas. Following this period is the Bronze Age, which ended about 1050, and which is designated Helladic for the Greek mainland, Minoan for Crete, and Cypriote for Cyprus. The periods are divided and subdivided (but not into equal parts) as follows: Neolithic I, and Neolithic II; Early Helladic, Middle Helladic, Late Helladic (each subdivided I, II, III; e.g., Middle Helladic II); and Early, Middle, and Late Minoan or Cypriote (with similar subdivisions). Late Helladic is usually designated Mycenaean in areas of Mycenaean culture. The foregoing terms (except Mycenaean) are abbreviated according to the following examples: E.H.; M.H.; M.M.; E.C.; L.C.; L.M. II; M.H. III.

Subsequent is the Iron Age, subdivided into the following periods: geometric (tenth, ninth, and eighth centuries), archaic (about 700 to 480), Classical (480 to 325), Hellenistic (325-146, but is sometimes extended to include the following period); then follow Roman Republican (to 27 B.C.), Roman Imperial (the next three centuries approximately), and, finally, Early Christian partly overlapping the preceding period. The terms Helladic, Hellenic (the first millennium B.C.), and Hellenistic are to be distinguished.

SYNOPTIC TABLES OF CHIEF ALTAR TYPES

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In the first column the numbers correspond with those in the text. Representations in art are omitted. Italics indicate the designation of an altar as given in the original publication. Unless otherwise qualified, "before the temple" means that the temple faces approximately east, and that the altar is to the east of the temple. Dates are B.C. unless designated otherwise.

N. B. Qualifying expressions such as probably and approximately, have been omitted.

ABBREVIATIONS

T.	Temple.
Sanct.	Sanctuary.
Diam.	Diameter.
H.	Height.
7c	Seventh century.
$\frac{1}{2}$ 7c	First half of seventh century.
2/2 6c	Second half of sixth century.
$\frac{1}{4}$ 6c	First quarter of sixth century.
$\frac{3}{4}$ 4c	Third quarter of fourth century.
E 5c	Early fifth century.
M 3c	Middle of third century.
L 4c	Late fourth century.
6.75 +	Preserved to 6.75 m., but originally was more.

CHAPTER II

§34, Hearth Altars.

Average dimensions: 2.16 x 1.20 plan.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Olous, T. of Aphrodite	10c		Under porch	Bounded by ash-lars; paved
2	Dreros, T. of Apollo	M 8c	1.47 x 0.90	In center of cella	In cella also wall bench, keraton, table of offerings; bounded by ash-lars
3	Perachora, T. of Hera Limenia	M 7c	1.40 x 1	Ditto	T. dates 8c; altar bounded by ash-lars
4	Prinias, T. A	7c	2.40 x 1.40	Ditto	Bounded and paved; wall bench in cella
5	Prinias, T. B	7c	2.75 x 1	Ditto	Bounded by ash-lars; omphalos
[6]	Vroulia, small T.	Late Myc. to 7c			No hearth altar, but monolithoid altar and pit
7	Neandria, T.	7c	2.60 x 1.13	Not in center of cella	
8	Dreros, T.	6c	2.50 x 1.50	In center of cella	U-shaped base by altar
9	Taxiarhis, T.	6c	2 x 1.50	In cella	No structural remains; much ash before temple
	Lucania, T. of Hera Argeia	6c		Ditto	Burnt earth and coals
10	Cyrene, T. of Apollo	600		Ditto	Crude pit
11	Thasos, Herakleion, small T.	6c		Ditto	Bounded by ash-lars
[12]	Thermos, apsidal megara	10c to 7c			Large ash strata
[13]	Olympia, apsidal megara	10c to 8c			Ditto
[14]	Sparta, T. of Orthia	9c or 8c		Corner of cella	Slabs enclosed earth; probably wall bench
[15]	Selinus, T. C				Is an offering table
16	Delphi, T. of Apollo	6c or earlier			Known from literature

§35, Masoned Well Altars.

Average dimensions: 3.40 diam., 0.74 H.

No.	Place and Name	Date	Diam., Extant Height	Location	Comments
1	Tiryns, T. of Hera	Late Myc., extant 8c or 7c	2 x 0.80	Before T., in Hellenic times	Extends below level of ground; rect. platform added
2	Akragas, Sanct. of Demeter & Kore, Precinct 1 <i>Altar 1</i>	6c	5.15 x 1.30	In western wing	Stepped shape; incomplete circle because against wall
3	Ditto, Precinct 2 <i>Altar 3</i>	6c	0.65 x 0.40	In western wing	Over rect. base; refuse pit nearby
4	Ditto, between Precinct 2 & T. 1 <i>Altar 8</i>	6c	7.85 x 0.45		
5	Ditto <i>Altar 10</i>	6c	2.75 x one course+		
6	Akragas, T. of Demeter & Kore	L 6c	2.35 x 0.75	By north wall of T.	
7	Ditto	L 6c	2.70 x 0.35+	Ditto	Stepped shape
8	Selinus, Sanct. of Demeter	6c	One course		

§§37-40, Cyprian Altars and Tables of Offering.

§	Place and Name	Period and Date	Dimensions in Plan; Height	Location	Comments
37	Agia Irini <i>Altar 49</i>	2, Geom. I to middle of III	1.60 x —; 0.30	In court	Monolithic; triangular
	Offering table, <i>inv. no. 2788</i>	Ditto		In court	Found near Altar 49; depressions in top
	<i>Altar 50</i>	3-6, Middle of Geom. III to end of Archaic II	0.70 x 0.70; 1.10	In court	Monolithic, depression in top; array of terracotta sculptures about altar
	Fetish	Ditto		Oval stone of basalt, near altar	

§§37-40, Cyprian Altars and Tables of Offering—*Continued*.

§	Place and Name	Period and Date	Dimensions in Plan; Height	Location	Comments
38	Agios Iacovos	2 or 3, Geom. II or III		In rear corner of building	Monolithic; may be offering table
39	Idalion, Western Acropolis				
	<i>Altar 48</i>	4, Geom. III and early Archaic I	1.80 x 1.80; 1.20	In court, against fortification wall	Of rubble
	<i>Altar 40</i>	5-6, Archaic I to 470	1.75 x 1.15; 1+	In court, free-standing	Ditto; inside enclosure in period 6
	<i>Altar 38</i>	Ditto	1.80 x 1.60; 0.50+	Ditto	Of rubble; fenced off area about altar
	Idalion, Eastern Acropolis	6c to 4c	1.90 x 1.40; 0.90	In large room	Of rubble; table of offerings nearby
40	Kition, Acropolis				
	<i>Altar 36</i>	6, Middle to end of Archaic II	0.80 x 0.75; 0.80	In hypaethral (?) shrine; before cult statue	Of rubble
	<i>Altar 37</i>	7, Cypro-Classic I	0.65 x 0.60; 0.40	Inside shrine, against wall	Monolithic, concave top
	<i>Altar 38</i>	Ditto	0.62 x 0.60; 1	Outside of shrine	Monolithic
	<i>Altar 39</i>	8, Cypro-Classic II	1.50 x 1.35; 1.15		Of limestone ash-lars; stepped shape
	<i>Altar 40</i>	Ditto	1.15 x 1.15; 0.60		Monolithic

CHAPTER III

§46, Ceremonial Altars.

Average dimensions: 3.30 x 2.05.

Typical dimensions: 1.80-4.50 length, 1.20-4.50 width.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Samos, Heraion <i>Altar I</i>	E 10c	2.40 x 1.30		Of rubble; earliest Hellenic Altar
2	<i>Altar II</i>	M 9c	3.30 x 2.30	Before T.	Of rubble
3	Ephesus, Artemision	8c	2. x 1.90	At peribolos wall	Ashlar; altar formed by widening peribolos wall; has ramp
4	Messenia, T. of Pamisos	7c	4.50 x 2.50	Before T.	Ashlar; has ramp
5	Vroulia, Acropolis	M 7c	2.62 x 1.45		Rubble
6	Vroulia, Acropolis	M 7c	2.40 x 1.35		Rubble
	Aigina, T. of Aphaia				
7	<i>Altar I</i>	2/2 7c	4.50 x 1.20	Before T.	Ashlar
8	<i>Altar II</i>	M or 2/2 6c	4.30 x ?	Before T.	Ashlar
	Athens, Precinct of Athena Nike				
9		7c		In precinct	
10		6c	1.80 x 1.30	In precinct	Ashlar
11	Mt. Anchesmos	6c		In enclosure	Of lesbian masonry
12	Halae	E 6c	3 x 1.30		
13	Miletus, Cape Monodendri	½ 6c	3.22 x 1.90	Alone near the shore	Ashlar; large platform; colossal altar
14	Athens, Agora	¾ 6c	3.65 x 1.22		Ashlar
	Akragas, Sanct. of Demeter and Kore				
15	<i>Altar 6</i>	6c	2.75 x 2.22	East of precinct 2, before entrance	
16	<i>Altar 9</i>	6c	4.50 x 4.50	Between precinct 2 and T. 1	
17	<i>Altar 13</i>	6c	2.90 x 1.70	South of T. 1, west of T. of Dioskouroi	Prothesis formed by recess in lower course
18	<i>Altar 14</i>	6c	2.50 x 1.80	Ditto	Ditto

§46, Ceremonial Altars—*Continued.*

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
19	Cape Zoster, T. of Apollo Zoster	E 6c	4.25 x 2.55	Before T.	Ashlar; has extra step at prothesis
20	Miletus, Delphinion	L 6c	4.01 x 3.43		
21	Delos, Sanct. of Anios	500	3.45 x 3.02	West of T., facing south	Ashlar; had 4-5 steps; "miniature stepped monumental"
[22]	Selinus, Sanct. of Demeter Malophoros	6c	4.35 x 2	In large room south of propylaea	Base or altar

§47, Low Monumental Altars.

Typical dimensions: 9-16.30 length, 1.50-3.15 width.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
	Sparta, Sanct. of Artemis Orthia				
1	<i>Altar I</i>	M 9c	2.20+ x 1.70	In precinct	Ashlar; stratum of incendiary remains
2	<i>Altar II</i>	L 9c	9 x 1.50	In precinct, east of T.	Ditto
3	<i>Altar III</i>	E 6c	8.20+ x 2.60	Ditto	Ashlar
4(?)	Mt. Hymettus, Sanct. of Herakles		4.80+ x 2	Rustic precinct?	
	Selinus, Precinct of Demeter Malophoros				
5	<i>Altar I</i>	7c	4.50 x 3	Before T.	Ashlar; stratum of incendiary remains
6	<i>Altar II</i>	E 6c	16.30 x 3.15	Before T.	Ditto
7	Kerkyra, T. of Artemis	6c	14(?) x	Before T.	

§48, Stepped Monumental Altars.

Average dimensions: 15.30 length, 6.40 width.

Typical dimensions: 5.40-29.50 length, 2.20-13.80 width.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
	Samos, Heraion				
1	<i>Altar III</i>	$\frac{1}{2}$ 8c	4 x 3.40	Before T.	Isodomic; antae
2	<i>Altar IV</i>	2/2 8c	4.90 x 3.90	Before T.	Ditto
3	<i>Altar V</i>	2/2 8c	11.50 x 4.40	Before T.	
4	<i>Altar VI</i>	E 7c	13 x 6	Before T.	Ditto
5	<i>Altar VII</i>	2/2 7c	13 x 6	Before T.	Ditto
6	<i>Altar VIII</i>	M 6c	38.70 x 19.25	Before T.	Ashlar; antae
	Olympia				
7	Heraion	7c	5.90 x 3.80	Before T.	Ashlar; later may have been covered by ash mound
8, 9	Upper Terrace	7c or 6c	5.40 x 5.40	Between treasuries of Selinus and Cyrene	Ashlar; altar of Ge or Rhea
10	Cyrene, T. of Apollo	L 7c	22.08 x 5	Before T.	Ashlar; antae
11	Cyrene, T. of Artemis	6c	13 x 5	Before T.	Ashlar; antae
12	Akragas, Sanct. of Demeter and Kore	E 6	13.50 x 4.53	East of two superimposed temples	Ashlar
13	Selinus, T. D	Before 560	18.20 x 7.40	Touching southeast corner of T.	Ashlar
14	Selinus, T. C	580-570 (?)	10+ x ?		May be Classical; Ashlar
15	Paestum, Archaic Enneastyles	570-554	21.20 x 6.26	Before T.	Ashlar
16	Paestum, Archaic Hexastyles	E 6c	15.10 x 3.15	Before T.	Ashlar
17	Lucania, T. of Hera Argeia	E 6c	6.95 x 2.15+	Northeast of T.	Ashlar
18	Akragas, T. of Herakles	540-480	29.50 x 10.57	Before T.	Ashlar
19	Syracuse, T. of Athena at Ortygia	L 6c	9+ x 5.15	Before T.	Ashlar
20	Aigina, T. of Aphaia	490	28.50 x 13.80	Before T.	Ashlar; paved approach; steps on east side?

§48, Stepped Monumental Altars—*Continued.*

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
21	Delphi, Chian Altar	500-479	8.50 x 2.20	Before T.	Ashlar
22	Athens, Acropolis, T. of Athena (Peisistratid)	6c	15 x 6	Before T.	Ashlar? Probably retained for Parthenon
[23]	Cape Zoster, T. of Apollo Zoster				See §46, No. 19
[24]	Selinus, T. B				Probably Classical; see §71, No. 17

§50, Hollow Ceremonial Altars.

Average dimensions: 2 x 2 plan.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Locri Epizephyrii, Early Ionic T.	E 6c	1.55 x 1.55	At southwest corner of cella, interior	Formed of upright slabs
2	Akragas, Sanct. of Demeter and Kore, <i>Altars 7</i>	6c	2.22 x 2.22	Outside precinct 2, against south wall	Ashlar; carried above circular course
3	Syracuse, T. of Athena at Ortygia	L 6c	1.33 x 1.33		Formed of upright slabs; does not pertain to the T.
4	Thebes, Sanct. of the Kabeiroi	Before 500	3 x 3	West of T.	
[5, 6]	Akragas, Sanct. of Demeter and Kore, <i>Altars 13 and 14</i>	6c			May be hollow ceremonial

§51, Ground Altars, Sacrificial Pits.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
—	Syracuse T. of Athena	8c	1.33 x 1.33		Ground altar; does not pertain to T.
1	Vroulia	L M to 7c	Diam. 1; depth 0.53	At entrance of shrine	Sacrificial pit (?)
2	Akragas, Sanct. of Demeter and Kore, <i>Altar 5</i>	6c	Plan 2.56 x 1.98	Southeast corner of precinct 1	Sacrificial pit; single course of ash-lars; rectangular opening in center
3	Akragas, open-air shrine	E 6c	Plan 0.85 x 0.65; depth 0.25	In shrine	Sacrificial pit
4	Akragas, Sanct. of Demeter and Kore, Precinct 2	6c		In west wing	Sacrificial or refuse pit; in same enclosure with well altar and ceremonial altar

§52, Rectangular Monolithic Altars.

Average dimensions: 1.19 x 0.87 plan.

No.	Place and Name	Date	Dimensions in Plan; Height	Location	Comments
1,2	Selinus, Sanct. of Demeter Malophoros	E 6	1.26 x 0.78; 1.06	In sanctuary	One partly embedded in ground (= chthonic?); barriers
3-5	Ditto		(a) 1.15 x 1; (b) 1 x 0.75; (c) 1.60 x 1; (d) 1.10 x 0.50;	Two outside the propylaea; one in room at propylaea	
6, 7	Selinus, Precinct of Zeus Meilichios	6c	(a) 1.30 x 0.90; (b) 0.90 x 0.60;	Before T.	
8	Akragas, Sanct. of Demeter and Kore <i>Altar 2</i>		1.38 x 1.33; 1.05	Eastern wing of precinct 1	
9	<i>Altar 4</i>		1.02 x 0.96; 0.43	Eastern room of precinct 2	Irregular depression in top

§53, Cylindrical Monolithic Altars.

No.	Place and Name	Date	Diameter; Height	Comments
1	Miletus, Delphinion	6c or earlier	—; 0.82	Under altar of Herakles; doubtful
2	Miletus, Lion Gate	6c	0.96; 0.70+	
3,4	Olympia			

CHAPTER IV

§59, Cylindrical Monolithic Altars.

Average height 0.79; average diameter 0.66; median height 0.78; median diameter 0.70. Nos. 1-21 Plain Shaft; Nos. 35-47 with Figures in Relief; Nos. 48-135 with Garlands and Bucrania in Relief; Nos. 137-142 with Other Ornamental Devices.

No.	Place and Name	Date	Height; Diameter	Comments
1	Athens, Dipylon Gate	E 3c	—; 1	Square plinth
2	Delos, Mt. Kynthos, Sanct. M		0.53+; 0.42	Concave upper face
3	Delos, Mt. Kynthos, Sanct. of the Gods of Askalon		0.65; 0.55	
4	Delos		0.53; 0.41	
5-9	Kos	2c and 1c		Funeral inscriptions
[10]	Miletus, Serapeion	6c and 1c	0.69; 0.65	Two are on rectangular plinth
11-13	Motya	Before 397	—; 0.50 to 0.55	
[14, 14a]	Olympia		(a) 0.63; 1.19	
15, 16	Priene, Sanct. of the Egyptian Gods	3c	(a) 0.59; 0.52 (b) 0.68; 0.39	Plain drums
[17-21]	Athens and Sparta			Round bases, probably of tables of offering
[35]	Athens	L 5c or E 4c	0.44; —	Twelve gods in relief
36	Cilicia	2 or 3c A.D.	1.17; —	Head in relief
37	Florence Museum	Roman		Sacrifice of Iphigeneia in relief

§59, Cylindrical Monolithic Altars—*Continued.*

No.	Place and Name	Date	Height; Diameter	Comments
38	Kos	Hellenistic	0.71; 0.94	Four winged Nikai in relief
39-42	Rhodes, etc.	Hellenistic	(a) 0.60; 0.77	Ditto
43	Pergamon		1.08; 0.70	Chariot with three horses and star in relief
44	Rhodes	Roman	0.41; 0.25	Shaft tapers; dwarf figure in niche in relief; two upper moldings
47	Samothrace	Hellenistic, Roman		Foundation and fragment of relief
48	Athens, Bakcheion	2c A.D.		In room of precinct
49	Athens, Theater of Dionysus	3c or 2c		Four masks of Dionysus in relief
50	Cumae	Hellenistic	1.22; 0.38	Cinerary urn above
51-69	Delos			
	(a)	Roman	0.55; 0.42	Rich garland
	(b)			
	(c) Three altars		one is 1.568; 0.70	Opposite triple shrine
	(d)		0.98+; 0.50	Touches krepis of a T; on high plinth
	(e) Two altars		(1) 0.80; 0.68 (2) 0.625; 0.55	
	(f)		0.75; 0.75	
	(g) Ten altars			One is on square plinth
70	Knidos		2 ft. 4½ in.; 1 ft. 10 in.	Over a funeral chamber
71-74	Kos			
	(b)	1c A.D.	0.825; 0.64	
	(c)		1.40; 1	

§59, Cylindrical Monolithic Altars—*Continued.*

No.	Place and Name	Date	Height; Diameter	Comments
75	Kos	3c	1.09; 0.82	
76-102	Kos	Roman		Probably from ancient cemeteries
103	Lesbos	Roman		Upper surface has relief of two snakes approaching bowl
104-112	Now in London		(a) 0.54; 0.37 (b) 0.65; 0.46 (d) Six altars height 0.70-0.86	
113-116	Pergamon	Hellenistic	(a) 0.67; 0.40 (b) 1.006; 1.16 (c) 0.625; 0.50 (d) 0.90; 0.50	Starfish in one loop, lizard in another Shaft tapers slightly Snakes about garland
117-128	Dodecanese	2c B.C. to 2c A.D.	H. 1.16 to 0.53; Diam. 0.96 to 0.44	Funeral inscriptions
129	Rhodes		0.48; 0.39	
130, 131	Rhodes		(a) 0.635; (b) 0.46;	Panels with reliefs; (a) has square plinth
132	Sparta	Roman Imperial	0.30; 0.38	
133-135	Thera	2c and 1c	(c) 0.60; 0.35	
137	Alexandria	2c or 1c		Interior hollowed out to serve as funeral urn; broad frieze of triglyphs and metopes
138	Athens	L 5c or E 4c	0.79+; 0.855	Depression in upper surface
139, 140	Knidos		(a) 2 ft. 6 in.; 2 ft. 1 in. (b) 3 ft. 6 in.; 2 ft. 5 in.	Each has snake on shaft On square plinth
141	Olympia		0.70; 1.52	Two superimposed drums carrying triglyphs and metopes
142	Ialysos		1.09; 0.83	

§61, Rectangular Monolithic Altars.

Average height 0.65; average length 0.61; median height 0.59; median length 0.55.

Nos. 1-74 Flat-topped [1-28 Plain Shaft; 52-56 with Figures in Relief; 57-65 with Garlands and Bucrania in Relief; 68-74 with Other Ornamental Devices]; Nos. 75-93 with Barriers; Nos. 103, 104 Horned Altars; 105, 106 with Gables or Acroteria in Relief; 107-109 with Concave Sides. Inscriptions are not mentioned in all cases.

No.	Place and Name	Date	Height; Dimensions in Plan	Comments
1	Athens	Hadria- nic	1.02; 0.51 x 0.48	
2	Cape Zoster Kition			
3	<i>Altar 37</i>	5c	0.40; 0.65 x 0.60	Concave top
4	<i>Altar 38</i>	4c	1; 0.62 x 0.60	Oval moldings at a dis- tance from top and bottom
5	<i>Altar 40</i>	4c	0.60; 1.15 x 1.15	
6	Kos	Roman	0.25; 0.82 x 0.22	
7-11	Miletus	Roman and Hellen- istic	(a) 0.54 to 0.25 H; (b) 0.34; 0.23 x (c) 0.485; 0.38 x (d) 0.42; 0.77 x 0.30 (e) 0.59; 0.53 x 0.53 (f) 0.688; 0.408 x 0.433	All carry dedications
12			(g) 0.222; 0.283 x 0.122	Arula
13			(h) 0.235; 0.20 x	Arula
14			(i) 0.74 H.	
15			(j) 0.77; 0.34 x 0.30	
16			(k) 0.47; 0.18; 0.28 H	
[17]			(a) 1.25; 0.975 x 0.645	
[18]			(b) 0.84; 0.682 x 0.681	
19	Pompeii	2c	(c) 0.82; 0.685 x 0.65	Against a column
20	Pompeii		(a) 0.43; 0.53 x	
21-23	Pompeii			
24	Pompeii			
25	Pompeii			
26	Pompeii			
27	Rhodes			

§61, Rectangular Monolithic Altars—*Continued.*

No.	Place and Name	Date	Height; Dimensions in Plan	Comments
28	Rhodes	(b) Hellen- istic	(b) Width 0.24	
52	Athens	$\frac{1}{2}$ 2c A.D.		Scenes of Dionysus in relief
53	Lycia			Dwarf figure in relief; depression in upper surface
54	Pergamon		0.63; 0.41 x 0.27	Eagle over a garland in relief
55	Rhodes	Hellen- istic	0.45; 0.64 x	Funeral scene in relief panel
56	Rhodes			Patera in wreath in relief on upper surface; Potnia Theron on shaft
57	Pompeii	L 2c or or E 1c	0.36 H.	
58-62	Kos			Inscriptions
63	Priene	3c		Four medallion portraits
64	Sparta	Roman Imperial	0.57; 0.35 x	Two angles have Pan's heads instead of bucrania
65	Now in London	1c A.D.		Horned Zeus Ammon at two angles; ram's heads at two angles
68	Capua	Hellen- istic		
69	Capua	Hellen- istic	0.36; 0.26 x 0.26	Small depression in top surface
70	Capua	Hellen- istic	0.99; 0.94 x 0.62	
71-74	Miletus	Late Hellen- istic or Roman		Inscriptions
75	Cape Zoster			Small votive altar
76	Capua		[0.23]; 0.47 x	Upper part of altar
77, 78	Capua		0.48 Length	Ditto
78a	Capua		0.89 Length	

§61, Rectangular Monolithic Altars—*Continued.*

No.	Place and Name	Date	Height; Dimensions in Plan	Comments
79	Peiraeus		0.637; 0.814 x	On foundation forming prothysis
80	Philippi	200 A.D.	1.80; 1.10 x 0.70	
81-91	Pompeii	Roman	(d) 0.83; 1.20 x (e) 0.56; 0.37 x (f) 0.56; 0.40 x (g) 0.75; 0.38 x 0.38 (h) 0.585; 0.44 x 0.38 (i) 1.27; 0.682 x 0.65 (j) (1) 0.783; 0.58 x 0.522 (2) 0.79 Height	
92	Rhodes	2c or 1c	0.62; 0.83 x 0.42	Barrier on three sides; panel with funeral relief
93	Rhodes, from Kos	Hellenistic	0.40; 1.14 x 0.40	Rich garland; volute extends laterally beyond shaft
103, 104	Delos			
105	Rhodes		0.62 Height	Barrier on either side
106	Drama			Gorgon-head acroteria
107, 108	Olynthus			Terracotta miniatures
109	Pergamon			Relief shows altar or brazier

§62, Rectangular Monolithoid Altars.

No.	Place and Name	Date	Height; Dimensions in Plan	Comments
1	Athens, Sanct. of Zeus and Athena Phratrion	L 4c or E 3c	0.575; 0.805 x 0.58	Of upright slabs
2, 3	Colophon	Hellenistic	—; 0.80 x 0.80 —; 0.65 x 0.65	Ditto; in house Ditto

§62, Rectangular Monolithoid Altars—*Continued.*

No.	Place and Name	Date	Height; Dimensions in Plan	Comments
4	Soli, T. C	100 B.C.- 350 A.D.		Two ashlar bound with gypsum mortar
5	Soli, T. D	100 B.C.- 350 A.D.	—; 0.65 x 0.50	Of limestone rubble
	Delos, Mt. Kyn- thos			
6	Sanctuary H		0.75; 1.25 x 1	Of large and small granite blocks
7	Sanctuary L		0.50; 1 x 1	
8-11	West of Sanct. of Zeus Hyp- sistos		—; 1.10 x 1.10 —; 1.10 x 1.10 —; 1 x 0.40 —; 1 x 1	
12	Agora of Italians, Pro- pylaea		0.50; —	
13	Olynthus	E 4c	0.42; 0.67 x 0.48	In house; of rubble faced with plaster

§63, Rubble Cubical Altars.

No.	Place and Name	Date	Dimensions in Plan	Comments
1	Soli, T. B at Cholades	100 B.C.- 350 A.D.	2.50x 2.20	Plastered
2	Soli, T. D at Cholades	100-50 B.C.	2.55 x 2.50	
3	Soli, T. D at Cholades	100-50 B.C.	2.70 x 2.60	
4	Soli, T. E at Cholades	100-350 A.D.	2 x 2	Ramp up to altar
5	Vouni, Palace	430-380	1.95 x 1.70	
6	Vouni, Palace	500-440	2.70 x 1.54	

§69, Ceremonial Altars.

Average dimensions: plan 2.05 x 1.20, total height 1.27.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Athens, Acropolis, Cave of Pan		2 x 1.50	Before cult statue	
2	Athens, Altar of Aphrodite and Charites		1.638 x 1.452; H. 1.35		Volute barriers; body monolithic(?)
3	Athens, Acropolis, Propylaea	5c or earlier	1.75 x 1.75	At statue and offering table of Athena Hygieia	Body of upright slabs
3a	Athens, Agora	L 5c	2.16 x 0.96		
[4]	Athens, Agora				
5	Delos, Sanct. on Mt. Kynthos		2.20 x 1		
6	Delos, T. of Hera		2.22 x 1.36; H. 1.64	In front (to south) of T.	On krepis; body of upright slabs
7, 8	Delos, Agora of Italians, Dodekatheon	3c	(a) 2.95 x 1.46; 1.09 (b) 3.60 x 2.40		(a) Orthostate carries part of horizontal molding; barrier on three sides
9	Olynthus	2/2 5c	1.02 x 0.74; H. 0.57	In house	Gabled barrier
10	Olynthus	2/2 5c	1.20 x ?	In house	Gabled barrier; body of upright slabs
11	Olynthus	2/2 5c	0.94 x 0.645	In house	Body of upright slabs
12	Olympia, West of the Metroon		2.45 x 1.48		
13	Olympia, Terrace, West End	4c	2.77 x 2.25		Drums under altar were altars?
13a	Priene, Theater	180	1.65 x 0.93; H. 1.38	At outer edge of orchestra	Monolithic shaft; barrier on three sides
14, 15	Pompeii, Palaistra	Before 63 A.D.	(a) 1.53 x 1.23; H. 1.306		(a) Depression in top (b) May be offering table
16	Pompeii, T. of Zeus Meilichios	2/2 1c	2.956 x 1.93; H. 1.614	Before T.	
17	Pompeii, T. of Apollo		1.925 x ?; H. 1.743	South of T. (but before the entrance)	
18	Pompeii, Doric T.	2c	1.853 x 0.63 H. 0.708	Before T.	Three pairs of volutes

§70, Ceremonial Altars in Antis.

Average dimensions in plan at base: 2.9 x 2.2.

No.	Place and Name	Date	Dimensions in Plan (at base)	Location	Comments
[1]	Athens, Agora				
2	Delos, Poseideion		3.71 x 2.625		Table of offerings and perirrhanterion near altar
3	Selinus, T. of small Metopes	5c	2.73 x 2.65	Before T.	Three steps
4	Thasos, Sanct. of Poseidon	Hellen- istic or Roman	1.92 x 1.61 H. 1.085	Against out- side of temenos wall	Well preserved
5	Thasos, Sanct. of Poseidon	4c	3.40 x 2.10	In the court	

§71, Stepped Monumental Altars.

Average dimensions in plan: 24.59 x 10.2.

Typical dimensions in plan: 10-56 length, 2.42-26 width.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Akragas, Sanct. of Demeter and Kore, T. L	M 5c	15.37 x 8.15	Before T.	Antae
2	Akragas, T. of Hera	480-440	29.80 x 2.60	Before T.	Antae; 10 steps
3	Akragas, Olympieion	480-440	56 x 26(?)	Before T.	
4	Athens, Parthenon	L 5c	15 x 6	Before older T.	Altar retained from older T.
5	Athens, T. of Dionysus	E 4c (also 6c?)	11.50 x 30	Southeast of T.	Longitudinal axis of altar is east-west
[6]	Capua	2c	7 x 4.60		
7	Cyrene, T. of Apollo	M 4c	22.08 x 5 H. 2.40	Before T.	Rebuilt over older altar; well pre- served; antae
8	Delos, West of Prytaneion				Antae flank pro- thesis only
9	Delos, Mt. Kyn- thos, Sanct. E		4.40 x 4.20		
10	Epidauros, T. of Asklepios	380	16 x 3.50	Before T.	
[11]	Miletus, Bouleuterion	2c		In court	

§71, Stepped Monumental Altars—*Continued.*

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
12, 13	Nemea, T. of Zeus	4c and Later	40.58 x 2.42	Before T.	
14	Orchomenos, T. of Artemis Mesopolitis	3c	17.30 x 3.54	Before T. but not properly oriented	
15	Paestum, T. of Poseidon	440	10.05 x 2.89+	Before T.	
16	Samos, Heraion, <i>Altar IX</i>	Early Roman	38.70 x 19.25	Before T.	Rebuilding of earlier altar; antae
17	Selinus, Altar east of T. B	6c or Later	25 x 8		Oriented east-west
18	Stratos, T. of Zeus	L 4c	22.40 x 9.45	Before T.	
19	Syracuse, Great Altar of Hiero II	M 3c	194.95 x 20.85	Near the theater	Of individual form
20	Tegea, T. of Alea Athena	L 4c	23+ x 10.90	Before T.	
21	Teos, T. of Dionysus	200	? x 8	Before T.	

§72, Monumental Altars with Steps on the Short Side.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Pergamon, T. of Caracalla	E 3c A.D.	5.50 x 1.90	Before T.	
2	Priene, Sanct. of Egyptian Gods	3c	14.60 x 7.31		Antae
3	Sparta, Eurotas	2c	23.60 x 6.60		

§73, Altars of Undetermined Type.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Aliphera, T. of Asklepios	4c		Before T.	
2	Athens, T. of Ares	Early Roman		Before T.	
3	Athens, Sanct. of Asklepios	4c	6 x 3.50		
4-6	Delos, Dodekatheon	3c	(a) 6.30 x 3.60 (b) 4.65 x 3 (c) 5.65 x 3.90	(a) Before T. (c) Before T.	
7	Delos, Sanct. of the Dioskouroi		6.50 x 3.50	In northeast corner of sanct.	
8	Delos, Eileithyiaion		4.15 x 2.40		
9	Delos, T. of Artemis	L 5c	6 x 3		
[10]	Epidaurus, Asklepieion		4 x 3		
11	Kastraki, Upper T.	E 4c	3.40 x 2.40	Before T.	
12	Karditsa, T. of Apollo	333-247	6.50 x 4	Before T.	
13 (?)	Magnesia, T. of Zeus Sosipolis		4.50 x ?	West of T.	
14	Paestum, Corinthian-Doric T.	E 3c	4.88 x 2.44	Before T.	
15	Priene, T. of Zeus Olympios	3c	3.80 x 3.20	Before T.	
16	Priene, Agora	2/2 2c	4.20 x 3.40	In center of agora	
16a	Priene, Sanct. of Demeter and Kore	4c or 3c	4.40 x 1.55	Before T.	Sacrificial pit nearby
17	Selinus, T. B	2/4 3c	3.70 x 3.70	Before T.	
18	Thorikos, Theater	5c to 3c	4.10 x 1.90	Before T.	
19	Athens, East of Metroon	E 4c and Hellenistic	8.76 x 5.43		
20	Corinth, Sanct. of Asklepios and Hygieia	Hellenistic	8 x 1.50	Before T.	
21	Eretria, Theater	4c	7.30 x 4.20	Before T.	

§73, Altars of Undetermined Type—*Continued.*

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
22	Megara, Precinct of Zeus Aphesios		7.30 x 4.50	Before T.	
23	Notion, T. of Athena	Hadri- anic	8.40 x 6.10	Before T.	
24	Rhamnous, T. of Nemesis	430	7.70 x 3.25	Before T.	

§74, Colossal Altars.

Average dimensions in plan: 20.70 x 16.33.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Cyzicus	Trajan			Known from representations
2	Kos, Asklepieion	Hellen- istic	11.78 x 7.83		
3	Magnesia, T. of Artemis Leukophryene	3c	23.15 x 15.80	West of T.	
4	Pergamon, Great Altar	E 2c	34.70 x 34.60		Rich sculptural decoration; complex plan
5	Priene, T. of Athena	E 2c	13.20 x 7.12		

§§76, 77, Masoned and Monolithic Well Altars.

The first eight are Masoned, the remainder Monolithic.

No.	Place and Name	Date	Diameter; Height	Location	Comments
1	Amyklai	Hellen- istic	8.40;	West of Throne of Apollo	
[2]	Athens, Asklepieion	Classical ?	2.70; 2.20 deep		Well altar or sacrificial pit
3	Delos, Kabeireion	2c	1.60; 1.78		On base and platform
4	Delos, Tetragon Agora	400	2.20; 0.982		Opening in side

§§76, 77, Masoned and Monolithic Well Altars—*Continued.*

No.	Place and Name	Date	Diameter; Height	Location	Comments
5	Delos, North of Kabeirion		1.775; 0.983		Opening in side
6	Eleusis				
7	Megara, T. of Zeus Aphesios		2.75;	East of Sanct.	
8	Thasos, Sanct. of Poseidon		1.56; 0.985		
1	Delos, Mt. Kynthos, Antron of Apollo		1.90; 1.45		Two superimposed marble rings
2	Delphi, Tholos		1.40; 1.10	In center of Tholos	May have served as "hearth"

§78, Hollow Ceremonial Altars.

No.	Place and Name	Date	Dimensions in Plan	Location	Comments
1	Alexandria, Serapeion	Ptolemaic			Consists of two superimposed blocks
2	Athens, Erechtheion	Classical	1.70 x 1.20	In north porch under opening in the roof	
3	Eleusis	Roman			Of brick

§79, Low Monumental Altars.

No.	Place and Name	Date	Dimensions in Plan; Height	Location	Comments
1	Megalopolis	370 or Later	11.05+ x 1.956; 0.868		Of triglyphs and metopes
2	Perachora, T. of Hera Akraia	L 5c or E 4c	5+ x 2.062; 1.965	Before T.	Ditto; drainage channel
3, 4	Pergamon, Precinct of Demeter	3c B.C. and 2c A.D.	8.60 x 4.50; 0.95	Before T.	Volute extends laterally past body of altar
5	Sparta, T. of Artemis Orthia	225 A.D.	8.20+ x 2.60	Before T.	Rebuilding of older altar

§85, Sacrificial Pits.

No.	Place and Name	Date	Dimensions	Location	Comments
1 (?)	Athens, Cave of Pan	Classical?	Diam. 2.50; Depth 2.65;	In grotto	Or grave of Erechtheus? Cut in rock
2	Athens, Asklepieion		Diam. 2.70; Depth 2.20		
3 (a)	Delos, Mt. Kynthos, Antron of Apollo		1.20 x 0.90 plan; Depth 0.30	In grotto	Depression in rock
3 (b)	Delos, Mt. Kynthos, Antron of Apollo		0.80 x 0.75 plan; Depth 0.35	Before grotto	Depression in rock
4	Delos, Mt. Kynthos, Sanct. of Herakles or Dionysus		Width 0.66; Depth 0.52	Before ceremonial altar	Depression lined with slabs
5	Delos, Mt. Kynthos, Sanct. of Hera			Before a masoned altar	Ditto
6	Delos, Mt. Kynthos, Sanct. of Herakles or Dionysus	Hellenistic	0.75 x 0.75 plan; Depth 0.35		
7	Eretria, Sanct. of Isis	E 3c	1.40 x 1.40 plan; Depth 0.60	Between antae of T.	Of blocks projecting slightly above floor
7a	Lucania, T. of Hera Argeia	4 & 3c	2 x 1 plan; 4.30 deep	Before (north of) T.	Ashlar walls; burnt remains of victims, burnt wood
7b	Lucania, T. of Hera Argeia	Hellenistic to 2c A.D.	1 x 1.90 plan; 3.25 deep	Southwest of T.	Ditto
8-12	Megara, Sanct. of Zeus Aphesios		(a&b) 0.90 cube (c) 1.90 diam. (d) 0.60 diam. 1.10 depth (e) 0.60 diam.; 0.13 deep	In Rooms	(a&b) Filled with ashes (c) Paved with bricks; shallow (d) Connected with (e) by conduit
13 (?)	Philippi				Rock-cut
14	Priene, Sanct. of Demeter and Kore	4 or 3c	2.98 x 2.95 plan; 2 depth	In court	Ashlar walls; gabled wooden covering
15	Priene, Hieros Oikos	4 or 3c	1.50 x 1.60 plan; 1.50 depth	In room	Natural fissure in rock
16	Priene, Sanct. of Cybele	4 or 3c	1.50 x 1.50 plan; 1 depth	In court	Filled with ashes, bone fragments, potsherds

§85, Sacrificial Pits—*Continued.*

No.	Place and Name	Date	Dimensions	Location	Comments
17, 18	Samothrace, Kabeirion, New Temple	3c	(b) 2.50 x 2 plan; 1.50 depth	In apsis in rear of cella	(a) Semi-circular cavity through blocks (b) Behind (a) and partly lined with slabs
19, 20	Samothrace, Kabeirion, Old Temple	M 4c	(a) 2.60 x 2.60 plan (b) 1.60 x 1.35 plan	(a) In cella (b) In T.	Blocks about slight depressions
21, 22	Blisnizta, Tamam				Funnel-shaped openings at places of sacrifices
23 (?)	Stymphalia			Interior	
24	Thasos, Hera- kleion	Classi- cal		Near altar	Rock-cut pits with ashes
25	Thasos, Di- onysion	4c			
26	Thera, Temenos of Artemidoros				Oval pit cut in rock; near altar
27	Vroulia, Small T.	L. M. to 7c	1 diam.; 0.53 depth	Before en- trance of T.	Near altar; burnt particles in it
28	East Lokris				Rock-cut pit near altar

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mus.	museum	sanct.	sanctuary
prec.	precinct	T.	temple

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Numbers in parentheses indicate repetition of the entry on the same page.

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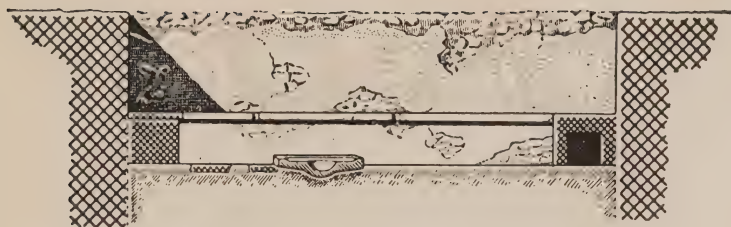


FIG. 55. Phaistos. Section showing offering tray in flooring.
(§ 7, No. 9)



FIG. 56. Phaistos. Offering tray.
(§ 7, No. 9)

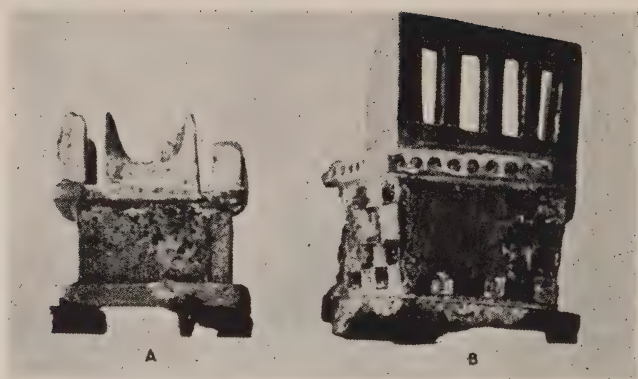


FIG. 57. Knossos. Models of shrines.
(§ 9, Nos. 2 and 8, respectively)

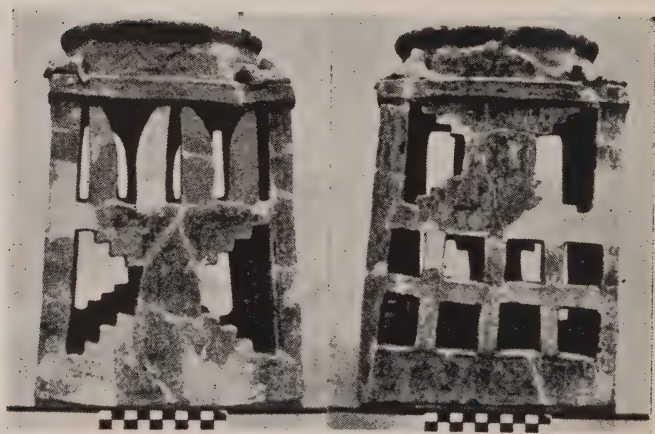


FIG. 58. Karphi. Sacred stand in form of shrine.
(§ 9, No. 9)

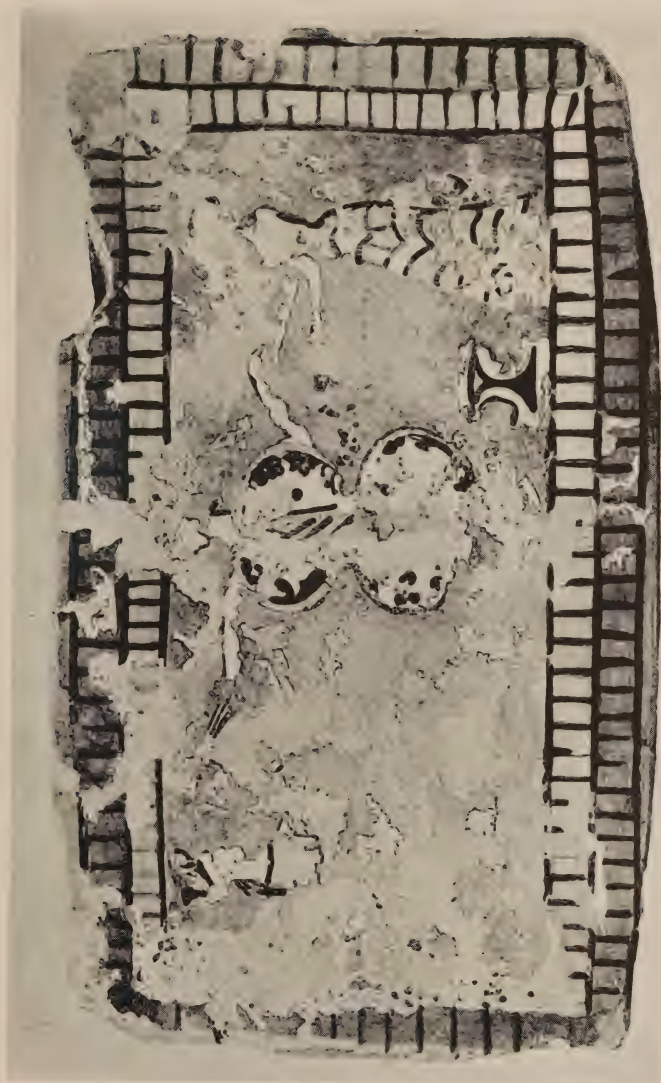


FIG. 59. Mycenaean. Plaque with representation of sacred stand before symbolic deity.
(§ 11, No. 4)



FIG. 60. Perachora, Temple of Hera Limenia. Hearth altar.
(§ 34, No. 3)



FIG. 61. Akragas, Sanctuary of Demeter and Kore. Well altar 8.
(§ 35, No. 4)



FIG. 62. Akragas, Sanctuary of Demeter and Kore.
Precinct 2, looking eastward: monolithic altar 4, sacri-
ficial pit, well altar 3, hollow ceremonial altar 7, cere-
monial altar 6. Cf. fig. 27.



FIG. 63. Akragas, Sanctuary of Demeter and Kore.
Precinct 1. Well altar 1.
(§ 35, No. 2)



FIG. 64. Agia Irini. Altar 49 with array of terracotta statuettes.

(§ 37)



FIG. 65. Agia Irini. Libation table, period 2.
(§ 37)



FIG. 66. Agia Irini. Altar 50 from period 3.
(§ 37)



FIG. 67. Samos, Heraion. Series of early ceremonial and stepped monumental altars I-VII under late archaic stepped monumental altar VIII.
(§ 46, Nos. 1, 2; § 48, Nos. 1-6)



FIG. 68. Vase Painting (Restored). Ceremonial altar with
prothesis and fire.
(§ 46, No. 23)



FIG. 69. Sparta, Temple of Artemis Orthia. Low monumental altar II and part of cobblestone pavement.
(§ 47, No. 2)

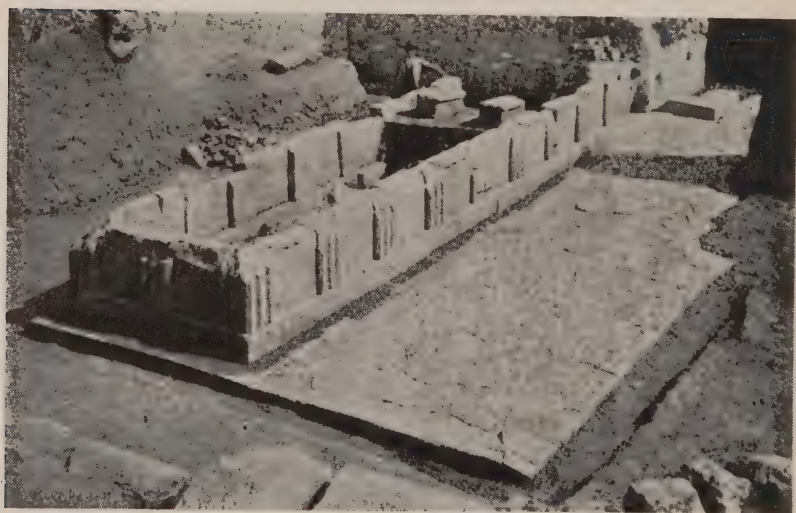


FIG. 70. Kerkyra, Temple of Artemis. Low monumental altar.
(§ 47, No. 7)

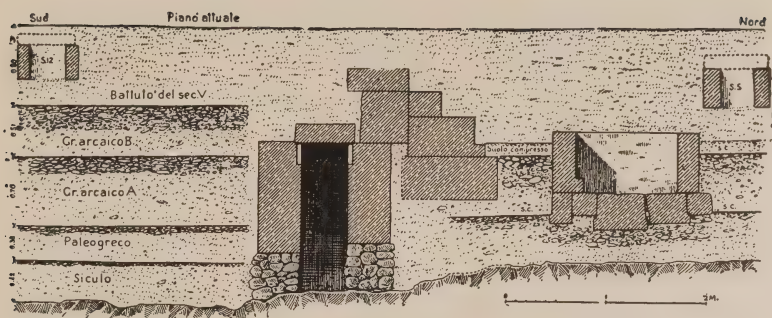


FIG. 71. Syracuse, Temple of Athena. Section through ground and triglyph altar [above the scale].
(§ 50, No. 3; § 51)

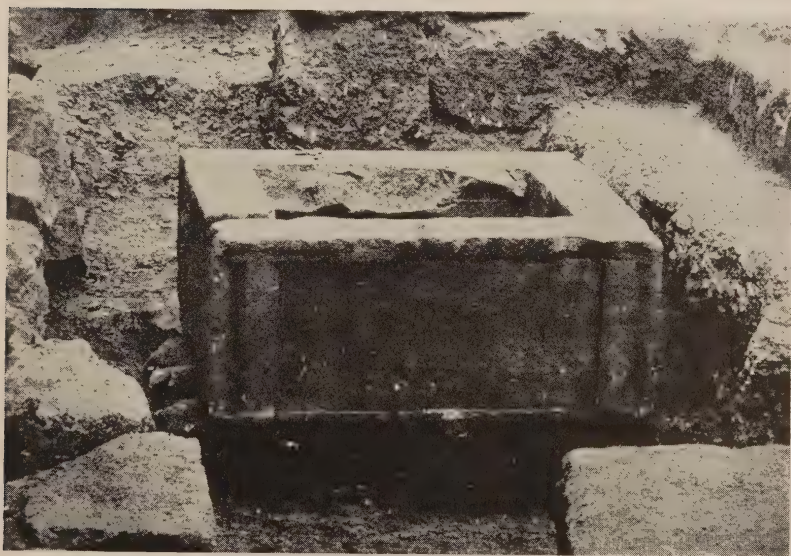


FIG. 72. Syracuse, Temple of Athena. Triglyph altar, of which section above.
(§ 50, No. 3)



FIG. 73. Athens. Nymphs dancing around a cylindrical monolithic altar.
(§ 59, No. 23)



FIG. 74. Pergamon. Hero relief with cylindrical monolithic altar.
(§ 59, No. 32)



FIG. 75. Athens. Cylindrical monolithic altar with masks of Dionysus (replacing bucrania) and garlands.
(§ 59, No. 49)



FIG. 76. Pompeii. Monolithic rectangular altar with volute barrier.
(§ 61, No. 85)



FIG. 77. Pompeii. Monolithic rectangular altar with cylinders replacing volute barriers.
(§ 61, No. 86)



FIG. 78. Olynthus. Cylindrical terracotta arula on stepped rectangular base. From a house.

(§ 65, No. 29)



FIG. 79. Olynthus. Rectangular arula with concave sides. From a house.

(§ 65, No. 28)



FIG. 80. Pompeii. Arula.
(§ 66, No. 56)



FIG. 81. Pompeii. Arulae.
(§ 66, Nos. 57, 58)



FIG. 82. Olynthus. Rectangular terracotta
arula with cock in relief. From a house.
(§ 65, No. 31)



FIG. 83. Pompeii. Stone arula.
(§ 66, No. 54)



Front.

Face longitudinale.

FIG. 84. Delos, Temple of Hera. Ceremonial altar with gabled barriers.
(§ 69, No. 6)



FIG. 85. Olynthus. Gabled barrier with palmettes. From a
ceremonial altar in the court of a house.
(§ 69, No. 10)



FIG. 86. Pompeii, Temple of Apollo. Ceremonial altar.
(§ 69, No. 17)

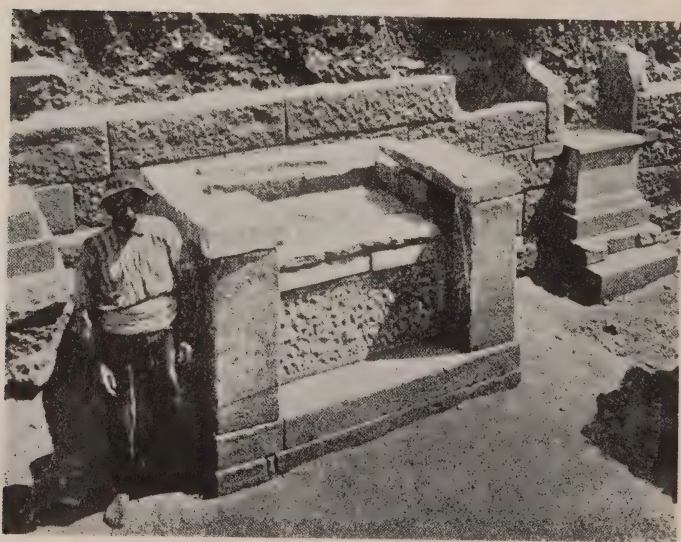


FIG. 87. Thasos, Sanctuary of Poseidon. Ceremonial altar in antis.
(§ 70, No. 4)



FIG. 88. Vase painting of Alkmene on altar of logs.
(§ 83, No. 4)



FIG. 89. Vase painting depicting altar of boulders.
(§ 84, No. 4)



FIG. 90. Cyrene, Temple of Apollo. Stepped monumental altar with
part of barrier.
(§ 71, No. 7)



FIG. 91. Eretria, Sanctuary of Isis. Sacrificial pit under the porch.
(§ 85, No. 7)

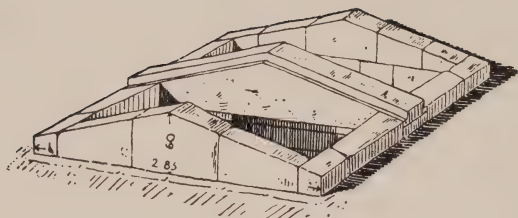


FIG. 92. Priene, Sanctuary of Demeter and Kore. Sacrificial pit, restored sketch of upper part.

(§ 85, No. 14)



FIG. 93. Priene, Sanctuary of Demeter and Kore. Sacrificial pit.

(§ 85, No. 14)

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